

| Paper Reference   | Tissue Type         | Marker Stained                    | Product #   | Company            | Dilution    |
|---|---------------------|-----------------------------------|-------------|--------------------|-------------|
| Jurczyk A, Nowosielska A, Przewozniak N, Aryee KE, DiIorio P, Blodgett D, Yang C, Campbell-Thompson M, Atkinson M, Shultz L, Rittenhouse A, Harlan D, Greiner D, Bortell R. (2015) Beyond the brain: disrupted in schizophrenia 1 regulates pancreatic $\beta$ -cell function via glycogen synthase kinase-3 $\beta$ . The Journal of the Federation of American Societies for Experimental Biology. 2015 Nov 6. pii: fj.15-279810. | Pancreas (OCT)      | actin                             |             | Millipore          | 1:1000      |
|   | Pancreas (OCT)      | active/dephosphorylated b-catenin |             | Millipore          | 1:500       |
|   | Pancreas (OCT)      | total b-catenin                   |             | Millipore          | 1:1000-2000 |
|   | Pancreas (OCT)      | BrdU                              |             | Accurate Chemicals | 1:200       |
|   | Pancreas (OCT)      | caspase 3 active                  |             | Abcam              | 1:500       |
|   | Pancreas (OCT)      | CK-19                             |             | Abcam              | 1:100       |
|   | Pancreas (OCT)      | cyclin D1                         |             | Cell Signaling     | 1:500       |
|   | Pancreas (OCT)      | p9GSK3b                           |             | Cell Signaling     | 1:500       |
|   | Pancreas (OCT)      | total GSK3b                       |             | Cell Signaling     | 1:500       |
|   | Pancreas (OCT)      | Disc1                             |             | Novus Biologics    | 1:150-250   |
|   | Pancreas (OCT)      | Sox9                              |             | Novus Biologics    | 1:200       |
|   | Pancreas (OCT)      | Glucagon                          |             | Sigma-Aldrich      | 1:200       |
|   | Pancreas (OCT)      | Insulin                           |             | Dako               | 1:250       |
| Pancreas (OCT)  | Pdx1                |                                   | R&D Systems | 1:200              |             |
| Taniguchi K, Russell MA, Richardson SJ, Morgan NG. (2015) The subcellular distribution of cyclin-D1 and cyclin-D3 within human islet cells varies according to the status of the pancreas donor. Diabetologia. 2015 Sep;58(9):2056-63. doi: 10.1007/s00125-015-3645-1. Epub 2015 Jun 9  | Pancreas (Paraffin) | Cyclin-D1                         | unknown     | Abcam              | Unknown     |
|   | Pancreas (Paraffin) | Cyclin-D2                         | unknown     | Abcam              | Unknown     |
|   | Pancreas (Paraffin) | Cyclin-D3                         | unknown     | Abcam              | Unknown     |

| Paper Reference   | Tissue Type                | Marker Stained | Product # | Company                  | Dilution |
|---|----------------------------|----------------|-----------|--------------------------|----------|
| Robert Z. Harmsa, Danielle N. Yardea, Zachary Guinna, Kristina M. Lorenzo-Arteagaa, Kevin P. Corleyb, Monina S. Cabrerab, Nora E. Sarvetnick. (2015) Increased expression of IL-18 in the serum and islets of type 1 diabetics. Molecular Immunology. 2015 April. doi: 10.1016/j.molimm.2014.12.012.  | Pancreas                   | IL-18          | Unknown   | Santa Cruz Biotechnology | Unknown  |
| Talitha van der Meulen, Cynthia J Donaldson, Elena Cáceres, Anna E Hunter, Christopher Cowing-Zitron, Lynley D Pound, Michael W Adams, Andreas Zembrzycki, Kevin L Grove, Mark O Huising. (2015) Urocortin3 mediates somatostatin-dependent negative feedback control of insulin secretion Nature Medicine 21, 769-776  | Pancreas                   | <u>Ucn3</u>    | Unknown   | In-house                 | 1:2000   |
|   |                            | Glucagon       | 4031-01F  | EMD Millipore            | 1:7000   |
|   |                            | Insulin        | A0564     | Dako Cytomation Inc.     | 1:500    |
| Vendrame F, Pileggi A, Laughlin E, Allende G, Martin-Pagola A, Molano RD, Diamantopoulos S, Standifer N, Geubtner K, Falk BA, Ichii H, Takahashi H, Snowwhite I, Chen Z, Mendez A, Chen L, Sageshima J, Ruiz P, Ciancio G, Ricordi C, Reijonen H, Nepom GT, Burke GW 3rd, Pugliese A. (2010) Recurrence of type 1 diabetes after simultaneous pancreas-kidney transplantation, despite immunosuppression, is associated with autoantibodies and pathogenic autoreactive CD4 T-cells. Diabetes. 2010 Apr;59(4):947-57. doi: 10.2337/db09-0498. Epub 2010 Jan 19. | Pancreas Transplant Biopsy | CD3            | M7254     | Dako                     | 1:50     |
|   | Pancreas Transplant Biopsy | CD4            | PA0427    | Leica                    | 1:50     |
|   | Pancreas Transplant Biopsy | CD8            | M7103     | Dako                     | 1:50     |
|   | Pancreas Transplant Biopsy | CD20           | M0755     | Dako                     | 1:200    |
|   | Pancreas Transplant Biopsy | Glucagon       | A0565     | Dako                     | 1:75     |
|   | Pancreas Transplant Biopsy | Insulin        | A0564     | Dako                     | 1:50     |
|   | Pancreas Transplant Biopsy | IP-10          | ab9807    | Abcam                    | 3ug/ml   |
|   | Pancreas Transplant Biopsy | CD68           | M0814     | Dako                     | 1:100    |
|   | Pancreas Transplant Biopsy | IFN-alpha      | 21100-1   | PBL                      | 1:50     |

| Paper Reference  | Tissue Type                | Marker Stained    | Product #  | Company        | Dilution    |
|--|----------------------------|-------------------|------------|----------------|-------------|
|  | Pancreas Transplant Biopsy | MCP-1             | ab9858     | Abcam          | 10ug/ml     |
| Gianani, R., Campbell-Thompson, M., Sarkar, S. A., Wasserfall, C., Pugliese, A., Solis, J. M., Kent, S. C., Hering, B., West, E., Steck, A., Bonner-Weir, S., Atkinson, M., Coppieters, K., von Herrath, M., & Eisenbarth, G. S. (2010). Dimorphic histopathology of long standing childhood-onset diabetes. <i>Diabetologia</i> , 53(4), 690-8. | Pancreas                   | Insulin           | Unknown    | Abcam          | Unknown     |
|  | Pancreas                   | Glucagon          | Unknown    | Abcam          | Unknown     |
|  | Pancreas                   | Survivin          | Unknown    | Abcam          | Unknown     |
| Keenan, H.A., Sun, J.K., Levine, J., Doria, A., Aiello, L.P., Eisenbarth, G., Bonner-Weir, S., & King, G.L. (2010). Residual insulin production and pancreatic $\beta$ -cell turnover after 50 years of diabetes: Joslin Medalist Study. <i>Diabetes</i> , 59(11), 2846-53.  | Pancreas                   | Insulin           | 4011-01    | Linco          | 1:200       |
|  | Pancreas                   | Glucagon          | Gift       | M. Appel       | 1:2000      |
|  | Pancreas                   | Ki67              | 558615     | BD biosciences | 1:200       |
|  | Pancreas                   | CD3               | A0452      | Dako           | 1:50        |
| Penaranda, C., Tang, Q., Ruddle, N.H., & Bluestone, J. A. (2010). Prevention of diabetes by FTY720-mediated stabilization of peri-islet tertiary lymphoid organs. <i>Diabetes</i> , 59(60), 1461-8.  | Pancreas                   | mCD4              | Unknown    | Unknown        | Unknown     |
|  | Pancreas                   | hCD4              | Unknown    | Unknown        | Unknown     |
|  | Pancreas                   | mCD45R/B220       | Unknown    | Unknown        | Unknown     |
|  | Pancreas                   | hCD19             | Unknown    | Unknown        | Unknown     |
|  | Pancreas                   | mCD31             | Unknown    | Unknown        | Unknown     |
|  | Pancreas                   | mMAdCAM           | Unknown    | Unknown        | Unknown     |
|  | Pancreas                   | Mlyve-1           | Unknown    | Unknown        | Unknown     |
|  | Pancreas                   | Murine Fibroblast | Unknown    | Unknown        | Unknown     |
|  | Pancreas                   | PNAd              | Unknown    | Unknown        | Unknown     |
| Sarka, S. A., Lee, C. E., Victorino, F., Nguyen, T. T., Walters, J. A., Burrack, A., Eberlein, J., Hildemann, S. K., & Homann, D. (2011). Expression and regulation of chemokines in murine and human type 1 diabetes. <i>Diabetes</i> , Dec. 30. PMID: 22210319.  | Pancreas                   | Insulin           | A056401    | Dako           | 1:100       |
|  | Pancreas                   | Glucagon          | SAB4501137 | Sigma          | 1:100       |
|  | Pancreas                   | Chemokines        | Unknown    | Unknown        | 10-15 ug/mL |

| Paper Reference  | Tissue Type | Marker Stained                                 | Product #   | Company                  | Dilution |
|--|-------------|--|-------------|--------------------------|----------|
| Coppieters, K. T., Wiber, A., Amirian, N., Kay, T. W., & von Herrath, M. G. (2011). Persistent glucose transporter expression on pancreatic beta cells from longstanding type 1 diabetic individuals. <i>Diabetes/Metabolism Research and Reviews</i> , 27, 746-754. | Pancreas    | GLUT1  | Unknown     | Millipore                | Unknown  |
|  | Pancreas    | GLUT2  | Unknown     | Millipore                | Unknown  |
|  | Pancreas    | GLUT3  | Unknown     | Sigma Aldrich            | Unknown  |
|  | Pancreas    | Insulin  | A0564       | Dako                     | Unknown  |
|  | Pancreas    | CD68   | Unknown     | Dako                     | Unknown  |
| Freeby M, Ichise M, Harris PE. (2012). Vesicular monoamine transporter, type 2 (vmat2) expression as it compares to insulin and pancreatic polypeptide in the head, body and tail of the human pancreas. <i>Islets</i> , 4(6):393-397.                               | Pancreas    | Insulin  | AB63820     | Abcam                    | 1:200    |
|  | Pancreas    | Insulin  | A0564       | Dako                     | 1:500    |
|  | Pancreas    | Pancreatic Polypeptide                         | NB-100-1793 | Novus Biologicals        | 1:100    |
|  | Pancreas    | Pancreatic Polypeptide                         | A0619       | Dako                     | 1:2000   |
|  | Pancreas    | VMAT2  | AB1767      | Millipore                | 1:100    |
|  | Pancreas    | VMAT2  | 70808       | Abcam                    | 1:100    |
| Korpos E, Kadri N, Kappelhoff R, Wegner J, Overall CM, Weber E, Holmberg D, Cardell S, Sorokin L. (2012) The Peri-islet Basement Membrane, a Barrier to Infiltrating Leukocytes in Type 1 Diabetes in Mouse and Human. <i>Diabetes</i> , Nov 8. Epub ahead of print. | Pancreas    | Pan-Laminin                                    | 455         | Unknown                  | Unknown  |
|  | Pancreas    | Laminin $\alpha$ 1                             | 317         | Unknown                  | Unknown  |
|  | Pancreas    | Laminin $\alpha$ 2                             | 401         | Unknown                  | Unknown  |
|  | Pancreas    | Laminin $\alpha$ 2                             | 4H8         | Unknown                  | Unknown  |
|  | Pancreas    | Laminin 332 ( $\alpha$ 3 $\beta$ 3 $\gamma$ 2) | Unknown     | ImmunDiagnostik          | Unknown  |
|  | Pancreas    | Laminin $\alpha$ 4                             | 377         | Unknown                  | Unknown  |
|  | Pancreas    | Laminin $\alpha$ 4                             | 3D12        | Sorokin, L., unpublished | Unknown  |
|  | Pancreas    | Laminin $\alpha$ 5                             | 405         | Unknown                  | Unknown  |
|  | Pancreas    | Laminin $\alpha$ 5                             | 4C7         | Unknown                  | Unknown  |
|  | Pancreas    | Laminin $\beta$ 1                              | 3A4         | Unknown                  | Unknown  |
|  | Pancreas    | Laminin $\beta$ 1                              | 3.00E+05    | Unknown                  | Unknown  |
|  | Pancreas    | Laminin $\gamma$ 1                             | 3.00E+10    | Unknown                  | Unknown  |
|  | Pancreas    | Laminin $\beta$ 2                              | 489         | Unknown                  | Unknown  |
|  | Pancreas    | Laminin $\beta$ 2                              | 409         | Unknown                  | Unknown  |
|  | Pancreas    | Collagen IV                                    | Unknown     | Unknown                  | Unknown  |
|  | Pancreas    | Perlecan                                       | A716 C11L1  | Unknown                  | Unknown  |
|  | Pancreas    | Agrin  | Unknown     | Unknown                  | Unknown  |
| Pancreas   | Nidogen-1   | Unknown  | Unknown     | Unknown                  |          |

| Paper Reference | Tissue Type  | Marker Stained               | Product # | Company   | Dilution       |        |
|-----------------|--|------------------------------|-----------|---|----------------|--------|
|                 | Pancreas   | Nidogen-2                    | Unknown   | Unknown   | Unknown        |        |
|                 | Pancreas   | Collagen I                   | Unknown   | Chemicon  | Unknown        |        |
|                 | Pancreas   | Collagen III                 | Unknown   | Southern Biotech  | Unknown        |        |
|                 | Pancreas   | Collagen VI                  | Unknown   | Unknown   | Unknown        |        |
|                 | Pancreas   | Fibronectin                  | Unknown   | Unknown   | Unknown        |        |
|                 | Pancreas   | Tenascin-C                   | MT4       | Unknown   | Unknown        |        |
|                 | Pancreas   | Matrillin-2                  | Unknown   | Unknown   | Unknown        |        |
|                 | Pancreas   | Fibrillin-1                  | Unknown   | Unknown   | Unknown        |        |
|                 | Pancreas   | Fibrillin-2                  | Unknown   | Unknown   | Unknown        |        |
|                 | Pancreas   | $\beta$ -Dystroglycan        | Unknown   | Unknown   | Unknown        |        |
|                 | Pancreas   | Lutheran Blood Group Protein | Unknown   | Unknown   | Unknown        |        |
|                 | Pancreas   | CD45                         | 30G12     | Unknown   | Unknown        |        |
|                 | Pancreas   | CD45                         | LB13      | Unknown   | Unknown        |        |
|                 | Pancreas   | F4/80                        | CI:A3-1   | Serotec   | Unknown        |        |
|                 | Pancreas   | CD11c                        | N/418     | Nordic Biosite  | Unknown        |        |
|                 | Pancreas   | Meca 32 antigen              | Meca32    | Unknown   | Unknown        |        |
|                 | Pancreas   | CD31                         | Rb10      | <a href="http://www.hcdm.org/MoleculeInformation/tabid/54/Default.aspx">http://www.hcdm.org/MoleculeInformation/tabid/54/Default.aspx</a> | Unknown        |        |
|                 | Pancreas   | Cathepsin C                  | Unknown   | R&D   | Unknown        |        |
|                 | Pancreas   | Cathepsin S                  | Unknown   | From Eckkehard Weber  | Unknown        |        |
|                 | Pancreas   | Cathepsin W                  | Unknown   | Santa Cruz Biotechnology  | Unknown        |        |
|                 | Pancreas   | Insulin                      | Unknown   | Dako  | Unknown        |        |
|                 | Pancreas   | Glucagon                     | Unknown   | Dako  | Unknown        |        |
|                 | Yip, L., Creusot, R.J., Pager, C.T., Sarnow, P., Fathman, C.G. (2012). | PLNs                         | eIF4G     | 2469  | Cell Signaling | 1:1000 |
|                 |  | PLNs                         | Caspase 3 | 9662  | Cell Signaling | 1:1000 |

| Paper Reference  | Tissue Type | Marker Stained       | Product # | Company        | Dilution |
|--|-------------|----------------------|-----------|----------------|----------|
| Reduced DEAF1 function during type 1 diabetes inhibits translation in lymph node stromal cells by suppressing Eif4g3. J Mol Cell Biol, Epub ahead of print.  | PLNs        | Beta-Actin conj. HRP | 13E5      | Cell Signaling | 1:1000   |
|  | PLNs        | GAPDH                | Ab4985    | Abcam          | 1:2500   |
| Richardson, S. J., Leete, P., Bone, A. J., Foulis, A. K., Morgan N. G. (2012). Expression of the enteroviral capsid protein VP1 in the islet cells of patients with type 1 diabetes is associated with induction of protein kinase R and downregulation of Mcl-1. Diabetologia, Epub ahead of print. | Pancreas    | Insulin              | Unknown   | Dako           | 1:600    |
|  | Pancreas    | Enteroviral vp1      | 5D8/1     | Dako           | 1:2000   |
|  | Pancreas    | PKR                  | Unknown   | Abcam          | 1:1000   |
|  | Pancreas    | Mcl1                 | Unknown   | Abcam          | 1:600    |
| Dai, C., Brissova, M., Hang, Y., Thompson, C., Poffenberger, G., Shostak, A., Chen, Z., Stein, R., & Powers, A. C. (2012). Islet-enriched gene expression and glucose-induced insulin secretion in human and mouse islets. Diabetologia, 55(3): 707-18.  | Pancreas    | Insulin              | 40011-01F | Linco          | 1:1000   |
|  | Pancreas    | Glucagon             | 4031-01   | Linco          | 1:2000   |
|  | Pancreas    | Somatostatin         | 13-2366   | ARP            | 1:500    |
|  | Pancreas    | MafA                 | BL1225    | Bethyl         | 1:5000   |
|  | Pancreas    | MafB                 | BL1228    | Bethyl         | 1:4000   |
|  | Pancreas    | Pdx1                 | gift      | from C. Wright | 1:10000  |
|  | Pancreas    | a-Amylase            | A8273     | Sigma          | 1:2000   |
| Coppieters, K. T., Dotta, F., Amirian, N., Campbell, P. D., Kay, T. W., Atkinson, M. A., Roep, B. O., & von Herrath, M. G. (2012). Demonstration of islet-autoreactive CD8 T cells in insulinitic lesions from recent onset and long-term type 1 diabetes patients. J Exp Med., 209 (1):51-60.       | Pancreas    | Insulin              | Unknown   | Dako           | 1:140    |
|  | Pancreas    | HLA-ABC              | R70000-01 | Dako           | 1:100    |
|  | Pancreas    | CD8                  | 561946    | BD biosciences | 1:100    |
| Anagandula M, Richardson SJ, Oberste MS, Sioofy-Khojine AB, Hyöty H, Morgan NG, Korsgren O, Frisk G. (2013). Infection of human islets of  | Pancreas    | Chromogranin A       | Unknown   | Unknown        | 1:500    |
|  | Pancreas    | EV-P1                | Unknown   | Unknown        | 1:1000   |
|  | Pancreas    | dsRNA J2             | Unknown   | Invitrogen     | 1:1000   |
|  | Pancreas    | TLR3                 | Unknown   | Imgenex        | 1:100    |

| Paper Reference  | Tissue Type                            | Marker Stained | Product # | Company          | Dilution |
|--|--|----------------|-----------|------------------|----------|
| langerhans with two strains of coxsackie B virus serotype 1: Assessment of virus replication, degree of cell death and induction of genes involved in the innate immunity pathway. J Med Virol. 2013 Nov 19. doi: 10.1002/jmv.23835. [Epub ahead of print]   | Pancreas                               | EV-VP1         | Unknown   | Dako             | 1:500    |
|  | Pancreas                               | Insulin        | Unknown   | Invitrogen       | Unknown  |
|  | Pancreas                               | Glucagon       | Unknown   | Invitrogen       | Unknown  |
| Kavishwar A, Moore A. (2013) Sphingomyelin patches on pancreatic beta-cells are indicative of insulin secretory capacity. J Histochem Cytochem. 61(12):910-9. doi: 10.1369/0022155413502792. Epub 2013 Aug 6.  | Pancreas                               | Insulin        | Unknown   | Abcam            | 1:50     |
|  | Pancreas                               | Glucagon       | Unknown   | Abcam            | 1:100    |
| Rowe P, Wasserfall C, Croker B, Campbell-Thompson M, Pugliese A, Atkinson M, Schatz D. (2013) Increased complement activation in human type 1 diabetes pancreata. Diabetes Care. doi: 10.2337/dc13-0203. Epub 2013 Sep 16.   | Pancreas                               | C4d            | 2222-8004 | AbD Serotec      | Unknown  |
| Gardner JM, Metzger TC, McMahon EJ, Au-Yeung BB, Krawisz AK, Lu W, Price JD, Johannes KP, Satpathy AT, Murphy KM, Tarbell KV, Weiss A, Anderson MS. (2013) Extrathymic Aire-Expressing Cells are a Distinct Bone Marrow-Derived Population that Induce Functional Inactivation of CD4+ T Cells Immunity. 19;39(3):560-72. doi: 10.1016/j.immuni.2013.08.005. Epub 2013 Aug 29. | Pancreatic & nonpancreatic lymph nodes | AIRE           | Unknown   | gift: P.Peterson | Unknown  |
|  | Pancreatic & nonpancreatic lymph nodes | HLA-DP, DQ, DR | F0817     | Dako             | Unknown  |

| Paper Reference  | Tissue Type | Marker Stained | Product #  | Company                  | Dilution |
|--|-------------|----------------|------------|--------------------------|----------|
| Chen J, Feigenbaum L, Awasthi P, Butcher DO, Anver MR, Golubeva YG, Bamford R, Zhang X, St Claire MB, Thomas CJ, Discepolo V, Jabri B, Waldmann TA. (2013) Insulin-dependent diabetes induced by pancreatic beta cell expression of IL-15 and IL-15Ra. Proc Natl Acad Sci U S A.110(33):13534-9. doi: 10.1073/pnas.1312911110. Epub 2013 Jul 31. | Pancreas    | IL-15          | ab55276    | Abcam                    | Unknown  |
|  | Pancreas    | IL-15Ralpha    | Unknown    | Unknown                  | Unknown  |
| Hodik M, Lukinius A, Korsgren O, Frisk G. (2013) Tropism Analysis of Two Coxsackie B5 Strains Reveals Virus Growth in Human Primary Pancreatic Islets but not in Exocrine Cell Clusters In Vitro. Open Virol J. 2013 Apr 5;7:49-56. doi: 10.2174/1874357901307010049. Print 2013.  | Pancreas    | Chromogranin A | Unknown    | Unknown                  | 1:500    |
|  | Pancreas    | HEVP1          | Unknown    | Unknown                  | 1:1000   |
|  | Pancreas    | J2 anti-dsRNA  | Unknown    | Scicons Hungary          | 1:1000   |
| Taylor-Fishwick DA, Weaver JR, Grzesik W, Chakrabarti S, Green-Mitchell S, Imai Y, Kuhn N, Nadler JL. (2013). Production and function of IL-12 in islets and beta cells. Diabetologia., 56(1):126-35.  | Pancreas    | Insulin        | Unknown    | Abcam                    | 1:750    |
|  | Pancreas    | IL-12p70       | Unknown    | Bioss                    | 1:40     |
|  | Pancreas    | IL-12p35       | Unknown    | Santa Cruz Biotechnology | 1:40     |
| Butler AE, Campbell-Thompson M, Gurlo T, Dawson DW, Atkinson M, Butler PC. (2013). Marked Expansion of Exocrine and Endocrine Pancreas with Incretin Therapy in Humans with increased Exocrine Pancreas Dysplasia and the potential for Glucagon-producing Neuroendocrine Tumors. Diabetes, Mar 22.  | Pancreas    | Ki67           | Unknown    | Unknown                  | Unknown  |
|  | Pancreas    | insulin        | Unknown    | Unknown                  | Unknown  |
|  | Pancreas    | CD3            | Unknown    | Unknown                  | Unknown  |
|  | Pancreas    | glucagon       | Unknown    | Unknown                  | Unknown  |
|  | Pancreas    | CK-19          | Unknown    | Dako                     | 1:50     |
|  | Pancreas    | Glucagon       | Unknown    | Immunostar               | 1:1000   |
| Pancreas   | Insulin     | Unknown        | Invitrogen | 1:100                    |          |



| Paper Reference  | Tissue Type | Marker Stained  | Product # | Company   | Dilution |
|--|-------------|-----------------|-----------|-----------|----------|
| Valle A, Giamporcaro GM, Scavini M, Stabilini A, Grogan P, Bianconi E, Sebastiani G, Masini M, Maugeri N, Porretti L, Bonfanti R, Meschi F, De Pellegrin M, Lesma A, Rossini S, Piemonti L, Marchetti P, Dotta F, Bosi E, Battaglia M. (2013). Reduction of circulating neutrophils precedes and accompanies type 1 diabetes. <i>Diabetes</i> . Jun;62(6):2072-7. doi: 10.2337/db12-1345. Epub 2013 Jan 24.        | Pancreas    | Myeloperoxidase | Unknown   | Abcam     | Unknown  |
| Wojciech JG, Nadler Joseph L., Machida Y, Jerry L. Nadler, Imai Y, and Morris MA. (2014) Expression pattern of 12-lipoxygenases in human islets with type 1 diabetes and type 2 diabetes. <i>The Journal of Clinical Endocrinology &amp; Metabolism</i> . 2014 Dec 22. [Epub ahead of print]   | Pancreas    | 12-Loa          | Unknown   | Sigma     | 1:10     |
|  | Pancreas    | Insulin         | Unknown   | Abcam     | 1:1000   |
|  | Pancreas    | Glucagon        | Unknown   | Sigma     | 1:100    |
|  | Pancreas    | CD31            | Unknown   | Abcam     | 1:100    |
|  | Pancreas    | Mac2            | Unknown   | Cedarlane | 1:100    |
|  | Pancreas    | PPb             | Unknown   | Abcam     | 1:75     |
|  | Pancreas    | PPb             | Unknown   | Progen    | 1:50     |
|  | Pancreas    | Somatostatin    | Unknown   | Sigma     | 1:1000   |
|  | Pancreas    | Vimentin        | Unknown   | Abcam     | 1:250    |
| Krogvold L, Edwin B, Buanes T, Frisk G, Skog O, Anagandula M, Korsgren O, Undlien D, Eike M, Richardson SJ, Leete P, Morgan NG, Oikarinen S, Oikarinen M, Laiho JE, Hyöty H, Ludvigsson J, Hanssen KF, Dahl-Jørgensen K. (2014) Detection of a low-grade enteroviral infection in the islets of Langerhans of living patients newly diagnosed with type 1 diabetes. <i>Diabetes</i> . 2014 Nov 24. pii: DB_141370. | Pancreas    | VP1             | M706401-1 | Dako      | 1:2000   |
|  | Pancreas    | MHC class I     | ab70328   | Abcam     | 1:1500   |
|  | Pancreas    | Insulin         | C#A056401 | Dako      | 1:600    |
|  | Pancreas    | Glucagon        | C#ab82270 | Abcam     | 1:2000   |
| Piran R, Lee S-H, Li C-R, Charbono A,  | Pancreas    | Insulin         | Unknown   | USBIO     | 1:200    |

| Paper Reference   | Tissue Type | Marker Stained | Product # | Company                      | Dilution  |
|---|-------------|----------------|-----------|------------------------------|-----------|
| Bradley L M, and Levine F. (2014) Pharmacological induction of pancreatic islet cell transdifferentiation: relevance to type I diabetes. Cell Death and Disease 5, e1357; doi:10.1038/cddis.2014.311. Published online 31 July 2014.  | Pancreas    | Insulin        | Unknown   | Santa Cruz Biotechnology     | 1:200     |
|   | Pancreas    | Glucagon       | Unknown   | Sigma                        | 1:2000    |
|   | Pancreas    | Somatostatin   | Unknown   | Santa Cruz Biotechnology     | 1:200     |
|   | Pancreas    | PDX1           | Unknown   | Abcam                        | 1:2000    |
|   | Pancreas    | NKX6.1         | Unknown   | Beta Cell Biology Consortium | 1:1000    |
| Rodriguez-Calvo T, Ekwall O, Amirian N, Zapardial-Gonzalo J, and von Herrath MG (2014) Increased Immune Cell Infiltration of the Exocrine Pancreas: A Possible Contribution to the Pathogenesis of Type 1 Diabetes. Diabetes. Published online before print June 19, 104. Diabetes, June 19, pii: DB_140549.  | Pancreas    | Insulin        | Unknown   | DakoCytomation               | 1:140     |
|   | Pancreas    | glucagon       | Unknown   | DakoCytomation               | 1:130     |
|   | Pancreas    | CD8alpha       | 561946    | BD biosciences               | 1:100     |
|   | Pancreas    | CD4            | MAB379    | R&D                          | 1:100     |
|   | Pancreas    | CD11c          | Unknown   | eBioscience                  | 1:100     |
| Arif S, Leete P, Nguyen V, Marks K, Nor NM, Estorninho M, Kronenberg-Versteeg D, Bingley PJ, Todd JA, Guy C, Dunger DB, Powrie J, Willcox A, Foulis AK, Richardson SJ, de Rinaldis E, Morgan NG, Lorenc A, Peakman M. (2014) Blood and islet phenotypes indicate immunological heterogeneity in type 1 diabetes. Diabetes. Jun 17. pii: DB_140365. [Epub ahead of print]. | Pancreas    | Insulin        | A056401   | Dako                         | Unknown   |
|   | Pancreas    | CD45           | M0701     | Abcam                        | Unknown   |
|   | Pancreas    | Glucagon       | A0565     | Dako                         | Unknown   |
|   | Pancreas    | CD20           | M0755     | Dako                         | Unknown   |
|   | Pancreas    | CD68           | M0876     | Dako                         | Unknown   |
|   | Pancreas    | CD8            | GR404-4   | Abcam                        | Unknown   |
| Marika Bogdani, Pamela Y. Johnson, Susan Potter-Perigo, Nadine Nagy, Anthony J. Day, Paul L. Bollyky, and Thomas N. Wight (2014) Hyaluronan and Hyaluronan Binding Proteins Accumulate in both Human Type 1   | Pancreas    | CD3            | Unknown   | Abcam                        | 10 ug/ml  |
|   | Pancreas    | CD20           | Unknown   | Abcam                        | 1.8 ug/ml |
|   | Pancreas    | CD31           | Unknown   | Abcam                        | 3.5 ug/ml |
|   | Pancreas    | CD45           | Unknown   | Abcam                        | 5 ug/ml   |
|   | Pancreas    | Synaptophysin  | Unknown   | Dako                         | 1:100     |
|   | Pancreas    | Insulin        | ab6995    | Abcam                        | 1:12000   |

| Paper Reference  | Tissue Type | Marker Stained         | Product #  | Company                  | Dilution |
|--|-------------|------------------------|------------|--------------------------|----------|
| Diabetic Islets and Lymphoid Tissues and Associate with Inflammatory Cells in Insulinitis. Diabetes Published online before print March 27, 2014, doi: 10.2337/db13-1658 Diabetes, March 27  | Pancreas    | Glucagon               | Unknown    | Unknown                  | 1:1000   |
|  | Pancreas    | Somatostatin           | Unknown    | Unknown                  | 1:1000   |
|  | Pancreas    | Pancreatic Polypeptide | Unknown    | Abcam                    | 1:1000   |
|  | Pancreas    | TSG-6                  | Unknown    | Unknown                  | 1:1000   |
|  | Pancreas    | IalphaI                | Unknown    | Unknown                  | 1:1000   |
| Ye J, Vives-Pi M, Gillespie KM (2014) Maternal microchimerism: increased in the insulin positive compartment of type 1 diabetes pancreas but not in infiltrating immune cells or replicating islet cells. PLoS One. Jan 31;9(1):e86985. doi: 10.1371/journal.pone.0086985. eCollection 2014. | Pancreas    | Insulin                | A0564      | Dako                     | Unknown  |
|  | Pancreas    | Glucagon               | A0565      | Dako                     | Unknown  |
|  | Pancreas    | Somatostatin           | SC-13099   | Santa Cruz Biotechnology | Unknown  |
|  | Pancreas    | GATA4                  | SC-1237    | Santa Cruz Biotechnology | Unknown  |
|  | Pancreas    | Cytokeratin-19         | Ab9221     | Abcam                    | Unknown  |
|  | Pancreas    | Ki67                   | Ab833      | Abcam                    | Unknown  |
|  | Pancreas    | CD68                   | m0876      | Dako                     | Unknown  |
|  | Pancreas    | CD45                   | M0701      | Dako                     | Unknown  |
|  | Pancreas    | Nestin                 | MAB5326    | Millipore                | Unknown  |
|  | Pancreas    | CD34                   | 73403      | Invitrogen               | Unknown  |
| Engin F, Nguyen T, Yermalovich A, Hotamisligil GS. (2014) Aberrant islet unfolded protein response in type 2 diabetes. Sci Rep. doi: 10.1038/srep04054.  | Pancreas    | Insulin                | Unknown    | Linco                    | 1:200    |
|  | Pancreas    | ATF6alpha              | Unknown    | Santa Cruz Biotechnology | 1:20     |
|  | Pancreas    | sXBP1                  | Unknown    | In house                 | 1:20     |
|  | Pancreas    | P-eIF2alpha            | Unknown    | Invitrogen               | 1:20     |
| Cheung SS, Ou D, Metzger DL, Meloche M, Ao Z, Ng SS, Owen D, Warnock GL. (2014) B7-H4 Expression in Normal and Diseased Human Islet $\beta$ Cells. Pancreas 43(1):128-34. doi: 10.1097/MPA.0b013e31829695d2.   | Pancreas    | Insulin                | Unknown    | Accurate Lab             | 1:100    |
|  | Pancreas    | Glucagon               | Unknown    | Sigma                    | 1:500    |
|  | Pancreas    | Somatostatin           | Unknown    | Cell Marque              | 1:200    |
|  | Pancreas    | B7-H4                  | 12-5949-41 | eBiosciences             | 1 ug/ml  |
|  | Pancreas    | B7-H4                  | Unknown    | R&D                      | 1 ug/ml  |
| Richardson, S.J., Leete, P., Dhayal, S., Russell, MA., Oikarinen, M., Laiho, J., Svedin, S., Lind, K., Rosenling, T.,  | Pancreas    | Insulin                | A0564      | Dako                     | 1:600    |
|  | Pancreas    | Enteroviral VP1        | M7064      | Dako                     | 1:2000   |
|  | Pancreas    | ATP5B                  | HPA001520  | Sigma                    | 1:500    |

| Paper Reference   | Tissue Type         | Marker Stained          | Product # | Company        | Dilution |
|---|---------------------|-------------------------|-----------|----------------|----------|
| Chapman, N., Bone, A.J., nPOD-V Consortium, Foulis, A.K., Frisk, G., Flodström-Tullberg, M., Hober, D., Hyöty, H., Morgan, N.G. (2014). Evaluation of the fidelity of immunolabelling obtained with clone 5D8/1, a monoclonal antibody directed against the enteroviral capsid protein, VP1, in human pancreas. <i>Diabetologia</i> 57(2): 392-401. | Pancreas            | CKB                     | HPA001254 | Sigma          | 1:500    |
| Reddy S, Zeng N, Al-Diery H, Jung D, Yeu C, Joret MO, Merrilees MJ, Wu F. (2015) Analysis of peri-islet CD45-positive leucocytic infiltrates in long-standing type 1 diabetic patients. <i>Diabetologia</i> . 2015 Feb 17. [Epub ahead of print]  | Pancreas            | Insulin                 | A0564     | Dako           | 1:600    |
|   | Pancreas            | Glucagon                | A0565     | Dako           | 1:200    |
| Campbell-Thompson, M. L., Heiple, T., Montgomery, E., Zhang, L., Schneider, L. Staining Protocols for Human Pancreatic Islets. <i>J. Vis. Exp.</i> (63), e4068, doi:10.3791/4068 (2012).  | Pancreas (paraffin) | Amylase                 | SC-46657  | Santa Cruz     | Unknown  |
|   | Pancreas (paraffin) | Amylin                  | MCA11267  | Serotec        | Unknown  |
|   | Pancreas (paraffin) | Carbonic anhydrase 19.9 | ab15146   | Abcam          | Unknown  |
|   | Pancreas (paraffin) | Caspase-3, cleaved      | 9961      | Cell Signaling | Unknown  |
|   | Pancreas (paraffin) | CD20                    | M0755     | DAKO           | Unknown  |
|   | Pancreas (paraffin) | CD3                     | A0452     | DAKO           | Unknown  |
|   | Pancreas (paraffin) | CD34                    | 3569      | Cell Signaling | Unknown  |
|   | Pancreas (paraffin) | CD4                     | M7310     | DAKO           | Unknown  |
|   | Pancreas (paraffin) | CD45                    | M0754     | DAKO           | Unknown  |

| Paper Reference | Tissue Type         | Marker Stained | Product #  | Company          | Dilution |
|-----------------|---------------------|----------------|------------|------------------|----------|
|                 | Pancreas (paraffin) | CD68           | M0876      | DAKO             | Unknown  |
|                 | Pancreas (paraffin) | CD8            | M7103      | DAKO             | Unknown  |
|                 | Pancreas (paraffin) | Chromogranin A | A0430      | DAKO             | Unknown  |
|                 | Pancreas (paraffin) | CK17           | M7046      | DAKO             | Unknown  |
|                 | Pancreas (paraffin) | CK19           | M0772      | DAKO             | Unknown  |
|                 | Pancreas (paraffin) | CK7            | M7018      | DAKO             | Unknown  |
|                 | Pancreas (paraffin) | C-peptide      | 4593       | Cell Signaling   | Unknown  |
|                 | Pancreas (paraffin) | Foxp3          | 14-4776-80 | e Bioscience     | Unknown  |
|                 | Pancreas (paraffin) | Ghrelin        | SC-10386   | Santa Cruz       | Unknown  |
|                 | Pancreas (paraffin) | Ghrelin        | ab85104    | Abcam            | Unknown  |
|                 | Pancreas (paraffin) | Glucagon       | A0565      | DAKO             | Unknown  |
|                 | Pancreas (paraffin) | Glucagon       | ab10988    | Abcam            | Unknown  |
|                 | Pancreas (paraffin) | Glucagon       | T-5037     | Bachem           | Unknown  |
|                 | Pancreas (paraffin) | Glut-1         | ab40084    | Abcam            | Unknown  |
|                 | Pancreas (paraffin) | Glut-2         | SC-9117    | Santa Cruz       | Unknown  |
|                 | Pancreas (paraffin) | Insulin        | A0564      | DAKO             | Unknown  |
|                 | Pancreas (paraffin) | Ki-67          | M7240      | DAKO             | Unknown  |
|                 | Pancreas (paraffin) | Mafa           | NB400-137A | Novus Biological | Unknown  |

| Paper Reference | Tissue Type         | Marker Stained         | Product #     | Company                              | Dilution |
|-----------------|---------------------|------------------------|---------------|--------------------------------------|----------|
|                 | Pancreas (paraffin) | Pancreatic polypeptide | 18-0043       | Invitrogen                           | Unknown  |
|                 | Pancreas (paraffin) | Pdx-1                  | ab47308       | Abcam                                | Unknown  |
|                 | Pancreas (paraffin) | Proinsulin             | NCL-proin-1G4 | Novocastra                           | Unknown  |
|                 | Pancreas (paraffin) | Proinsulin             | GS-9A8        | Developmental Studies Hybridoma Bank | Unknown  |
|                 | Pancreas (paraffin) | Secretagogin           | HPA 006641    | Sigma                                | Unknown  |
|                 | Pancreas (paraffin) | Smooth muscle actin    | ab5694        | Abcam                                | Unknown  |
|                 | Pancreas (paraffin) | Somatostatin           | A0566         | DAKO                                 | Unknown  |
|                 | Pancreas (paraffin) | Synaptophysin          | M0776         | DAKO                                 | Unknown  |
|                 | Pancreas (OCT)      | CD11b                  | ab6332        | Abcam                                | Unknown  |
|                 | Pancreas (OCT)      | CD11c                  | AHP1226       | Serotec                              | Unknown  |
|                 | Pancreas (OCT)      | CD25                   | NB 600-564    | Novus Biological                     | Unknown  |
|                 | Pancreas (OCT)      | CD94                   | ab61874       | Abcam                                | Unknown  |
|                 | Pancreas (OCT)      | GAD65                  | SC-130569     | Santa Cruz                           | Unknown  |
|                 | Pancreas (OCT)      | HLA-ABC                | M0736         | DAKO                                 | Unknown  |
|                 |                     |                        |               |                                      |          |
|                 |                     |                        |               |                                      |          |
|                 |                     |                        |               |                                      |          |
|                 |                     |                        |               |                                      |          |
|                 |                     |                        |               |                                      |          |
|                 |                     |                        |               |                                      |          |
|                 |                     |                        |               |                                      |          |
|                 |                     |                        |               |                                      |          |
|                 |                     |                        |               |                                      |          |
|                 |                     |                        |               |                                      |          |
|                 |                     |                        |               |                                      |          |
|                 |                     |                        |               |                                      |          |
|                 |                     |                        |               |                                      |          |



| Clone # |  |  |  |  |  |
|---------|--|--|--|--|--|
|         |  |  |  |  |  |
|         |  |  |  |  |  |
|         |  |  |  |  |  |
|         |  |  |  |  |  |
|         |  |  |  |  |  |
|         |  |  |  |  |  |
|         |  |  |  |  |  |
|         |  |  |  |  |  |
|         |  |  |  |  |  |
|         |  |  |  |  |  |
|         |  |  |  |  |  |
|         |  |  |  |  |  |
|         |  |  |  |  |  |
|         |  |  |  |  |  |
| Unknown |  |  |  |  |  |
| Unknown |  |  |  |  |  |
| Unknown |  |  |  |  |  |



| Clone #    |  |  |  |  |  |
|------------|--|--|--|--|--|
| Unknown    |  |  |  |  |  |
| 7218       |  |  |  |  |  |
|            |  |  |  |  |  |
|            |  |  |  |  |  |
| F7.2.38    |  |  |  |  |  |
| 4B12       |  |  |  |  |  |
| C8/144B    |  |  |  |  |  |
| L26        |  |  |  |  |  |
| Polyclonal |  |  |  |  |  |
| Polyclonal |  |  |  |  |  |
| Polyclonal |  |  |  |  |  |
| Kp1        |  |  |  |  |  |
| MMHA-2     |  |  |  |  |  |

| Clone #             |  |  |  |  |  |
|---------------------|--|--|--|--|--|
| ab9858              |  |  |  |  |  |
| Unknown             |  |  |  |  |  |
| Unknown             |  |  |  |  |  |
| Unknown             |  |  |  |  |  |
| Polyclonal          |  |  |  |  |  |
| Unknown             |  |  |  |  |  |
| B56                 |  |  |  |  |  |
| Polyclonal          |  |  |  |  |  |
| L3T4                |  |  |  |  |  |
| RPA-T4              |  |  |  |  |  |
| RA3.6B2             |  |  |  |  |  |
| H1B19               |  |  |  |  |  |
| 390                 |  |  |  |  |  |
| MECA367             |  |  |  |  |  |
| 223322              |  |  |  |  |  |
| ERTR7               |  |  |  |  |  |
| MECA79              |  |  |  |  |  |
| Polyclonal          |  |  |  |  |  |
| Polyclonal          |  |  |  |  |  |
| Goat<br>Polyclonals |  |  |  |  |  |



| <b>Clone #</b> |  |  |  |  |  |
|----------------|--|--|--|--|--|
| Unknown        |  |  |  |  |  |
| Unknown        |  |  |  |  |  |
| Unknown        |  |  |  |  |  |
| Unknown        |  |  |  |  |  |
| Unknown        |  |  |  |  |  |
| Unknown        |  |  |  |  |  |
| Unknown        |  |  |  |  |  |
| Unknown        |  |  |  |  |  |
| Unknown        |  |  |  |  |  |
| Unknown        |  |  |  |  |  |
| Unknown        |  |  |  |  |  |
| Unknown        |  |  |  |  |  |
| Unknown        |  |  |  |  |  |
| Unknown        |  |  |  |  |  |
| Unknown        |  |  |  |  |  |
| Unknown        |  |  |  |  |  |
| Unknown        |  |  |  |  |  |
| Unknown        |  |  |  |  |  |
| Unknown        |  |  |  |  |  |
| Polyclonal     |  |  |  |  |  |
| Polyclonal     |  |  |  |  |  |

| Clone #    |  |  |  |  |  |
|------------|--|--|--|--|--|
| monoclonal |  |  |  |  |  |
| Polyclonal |  |  |  |  |  |
| Unknown    |  |  |  |  |  |
| monoclonal |  |  |  |  |  |
| Unknown    |  |  |  |  |  |
| Unknown    |  |  |  |  |  |
| Polyclonal |  |  |  |  |  |
| Polyclonal |  |  |  |  |  |
| Polyclonal |  |  |  |  |  |
| Polyclonal |  |  |  |  |  |
| Unknown    |  |  |  |  |  |
| Unknown    |  |  |  |  |  |
| Polyclonal |  |  |  |  |  |
| Polyclonal |  |  |  |  |  |
| W6/32      |  |  |  |  |  |
| HIT8a      |  |  |  |  |  |
| Unknown    |  |  |  |  |  |
| Unknown    |  |  |  |  |  |
| Unknown    |  |  |  |  |  |
| Unknown    |  |  |  |  |  |

| <b>Clone #</b> |  |  |  |  |  |
|----------------|--|--|--|--|--|
| Unknown        |  |  |  |  |  |
| Unknown        |  |  |  |  |  |
| Unknown        |  |  |  |  |  |
| Unknown        |  |  |  |  |  |
| Unknown        |  |  |  |  |  |
| 10-11          |  |  |  |  |  |
| 6.1            |  |  |  |  |  |
| CR3/43         |  |  |  |  |  |



| Clone #    |  |  |  |  |  |
|------------|--|--|--|--|--|
| Monoclonal |  |  |  |  |  |
| Polyclonal |  |  |  |  |  |
| Polyclonal |  |  |  |  |  |
| monoclonal |  |  |  |  |  |
| monoclonal |  |  |  |  |  |
| monoclonal |  |  |  |  |  |
| Polyclonal |  |  |  |  |  |
| Polyclonal |  |  |  |  |  |
| Polyclonal |  |  |  |  |  |
| Polyclonal |  |  |  |  |  |
| 5D8/1      |  |  |  |  |  |
| EMR8-5     |  |  |  |  |  |
| Polyclonal |  |  |  |  |  |
| IMD-7      |  |  |  |  |  |
| Unknown    |  |  |  |  |  |



| Clone #    |  |  |  |  |  |
|------------|--|--|--|--|--|
| Unknown    |  |  |  |  |  |
| Unknown    |  |  |  |  |  |
| Unknown    |  |  |  |  |  |
| Unknown    |  |  |  |  |  |
| Unknown    |  |  |  |  |  |
| Polyclonal |  |  |  |  |  |
| Polyclonal |  |  |  |  |  |
| HIT8a      |  |  |  |  |  |
| 34930      |  |  |  |  |  |
| 3.9        |  |  |  |  |  |
| Polyclonal |  |  |  |  |  |
| Unknown    |  |  |  |  |  |
| Polyclonal |  |  |  |  |  |
| L26        |  |  |  |  |  |
| PG-M1      |  |  |  |  |  |
| Unknown    |  |  |  |  |  |
| Unknown    |  |  |  |  |  |
| Unknown    |  |  |  |  |  |
| Unknown    |  |  |  |  |  |
| Unknown    |  |  |  |  |  |
| Unknown    |  |  |  |  |  |
| K36aC10    |  |  |  |  |  |

| Clone #          |  |  |  |  |  |
|------------------|--|--|--|--|--|
| Unknown          |  |  |  |  |  |
| Unknown          |  |  |  |  |  |
| Unknown          |  |  |  |  |  |
| Unknown          |  |  |  |  |  |
| Unknown          |  |  |  |  |  |
| Polyclonal       |  |  |  |  |  |
| Polyclonal       |  |  |  |  |  |
| Polyclonal       |  |  |  |  |  |
| Polyclonal       |  |  |  |  |  |
| RCK108           |  |  |  |  |  |
| Polyclonal       |  |  |  |  |  |
| PG-M1            |  |  |  |  |  |
| 2B11 +<br>PD7/26 |  |  |  |  |  |
| 10C2             |  |  |  |  |  |
| B1-3C5           |  |  |  |  |  |
| Unknown          |  |  |  |  |  |
| Unknown          |  |  |  |  |  |
| Polyclonal       |  |  |  |  |  |
| Unknown          |  |  |  |  |  |
| Unknown          |  |  |  |  |  |
| Unknown          |  |  |  |  |  |
| Unknown          |  |  |  |  |  |
| H74              |  |  |  |  |  |
| Unknown          |  |  |  |  |  |
| Polyclonal       |  |  |  |  |  |
| 5D8/1            |  |  |  |  |  |
| Polyclonal       |  |  |  |  |  |







