

SUPPLEMENTARY DATA

Supplementary Table 1. Primary antisera employed in the human G1/S atlas.

| Protein/ Antibody | Immunohistochemistry | | | Immunoblot | | |
|----------------------|----------------------|-----------------------|----------|----------------|---------------------------|----------|
| | Company | Cat# | dilution | Company | Cat# | dilution |
| Ki67 | Neomarker | RM-9106-S | 1:100 | | | |
| Rb | Neomarker | RB-1441-P | 1:50 | PharMingem | 554136 | 1:1000 |
| p107 | Santa Cruz | sc-318 | 1:50 | Santa Cruz | sc-318 | 1:1000 |
| p130 | Neomarker | MS-866-P1 | 1:50 | Neomarker | 866p912b | 1:1000 |
| Cyclin D1 | Cell Signaling | DCS6 | 1:100 | Cell Signaling | DCS6 | 1:1000 |
| Cyclin D2 | Abcam | Ab-3085 | 1:100 | Abcam | Ab-3085 | 1:1000 |
| | Sigma | C7339, WH0000894M1 | 1:2000 | Sigma | C7339, WH0000894 M1 | 1:2000 |
| Cyclin D3 | Abcam | DCS22 | 1:100 | Abcam | DCS22 | 1:1000 |
| Cdk4 | Santa Cruz | sc-260 | 1:100 | Santa Cruz | sc-260 | 1:1000 |
| Cdk6 | Abcam | Ab-3126 | 1:100 | Abcam | Ab-3126 | 1:1000 |
| | Santa Cruz | sc-177 | 1:100 | | | |
| Cyclin A2 | Santa Cruz | sc-596 | 1:50 | Sigma | c-4710 | 1:1000 |
| Cyclin E1 | Santa-Cruz | sc-247 | 1:50 | Santa Cruz | sc-247 | 1:1000 |
| Cdk1 | Santa Cruz | sc-747 | 1:50 | Cell Signaling | 9112 | 1:1000 |
| Cdk2 | Santa Cruz | sc-163 | 1:50 | Santa Cruz | Sc-163 | 1:1000 |
| p15 | Neomarker | MS-1053-P1 | 1:100 | Santa Cruz | Sc-613 | 1:500 |
| p16 | Santa Cruz | sc-468 | 1:100 | PharMingem | 51-1325gr | 1:500 |
| p18 | Santa Cruz | sc-1064 | 1:100 | Abcam | 3216-500 | 1:500 |
| p19 | Santa Cruz | sc-1063 | 1:50 | invitrogen | 378700 | 1:500 |
| p21 | BD PharMingen | 556431 | 1:100 | PharMingem | 556431 | 1:1000 |
| p27 | Cell Signaling | 2552 | 1:100 | Cell Signaling | 2552 | 1:1000 |
| | Neomarker | DCS-72.F6 | 1:100 | | | |
| p57 | GeneTex | GTX23223 | 1:100 | GeneTex | GTX23223 | 1:1000 |
| E2F1 | Santa Cruz | sc-193 | 1:50 | Calbiochem | Calbio-NA49 | 1:1000 |
| E2F2 | Santa cruz | sc-632 | 1:50 | Bioworld | K236 | 1:1000 |
| E2F3 | Santa cruz | sc-878 | 1:50 | Abcam | Ab-54945 | 1:1000 |
| E2F4 | Santa Cruz | sc-1082 | 1:50 | Santa Cruz | Sc-1082 | 1:500 |
| E2F5 | Santa Cruz | sc-999 | 1:50 | Santa Cruz | sc-999 | 1:500 |
| E2F6 | Santa Cruz | sc-22823 | 1:50 | Santa Cruz | sc-22823 | 1:500 |
| E2F7 | Santa Cruz | sc-66870 | 1:50 | Santa Cruz | sc-66870 | 1:500 |
| E2F8 | Santa Cruz | sc-130313 | 1:50 | Santa Cruz | sc-130313 | 1:500 |
| Nucleolin | Santa Cruz | Sc-17826 | 1:100 | | | |
| Hsp-90 | | | | Santa cruz | Sc-33755 | 1:2000 |
| H3 | | | | Cell Signaling | 9715 | 1:2000 |
| RNA pol | | | | millipore | 05623 | 1:2000 |
| Tubulin | | | | calbiochem | Cp-06 | 1:2000 |

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Supplementary Figure 1. Subcellular Localization of Cdk6, p16, p21, p27 and p57 in Human Alpha, Beta and Delta cells. Left Panel. Five different human cadaveric islet preparations were immunolabeled for insulin, glucagon (“Gluc”) somatostatin (“SSt”) and the G1/S molecules above, as well as DAPI to highlight the nuclei. The color code for the various molecules is shown in the Figure. Antisera were as shown in Supplemental Table 1 with the exception of the primary antisera for glucagon and somatostatin which were catalogue numbers 2760 and sc-20999 from Cell Signaling (Danvers, MA) and Santa Cruz (Dallas, TX), respectively. Right Panel. The percentage of nuclei that contained the five G1/S molecules in the nuclei of glucagon+ or somatostatin+ cells. For each bar, 180-200 alpha or delta cells were counted from a total of five different human islet preparations. Cdk6 and p16 were readily detected in both alpha and delta cells, and were principally in the cytoplasmic compartment. p27 was not seen in delta cells, but was readily apparent in alpha cells, and was cytoplasmic. p21 and p57 were not observed in somatostatin+ or glucagon+ cells, although they could be readily seen in insulin+ cells (left panel).

