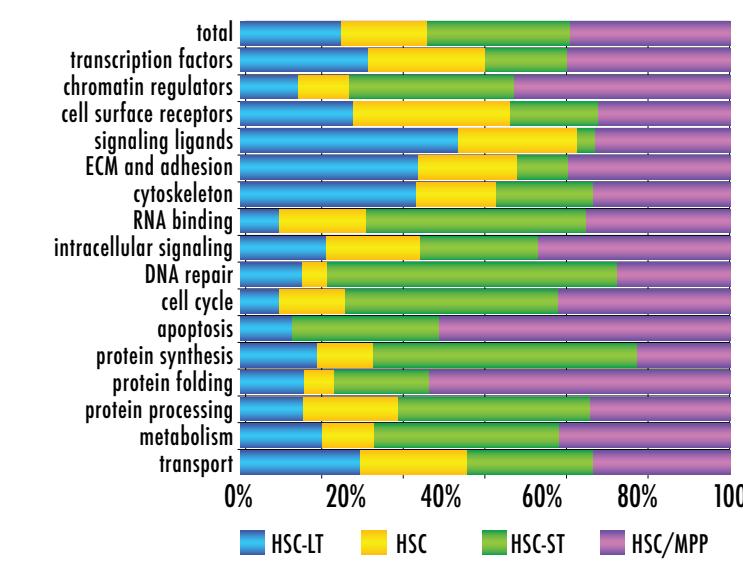
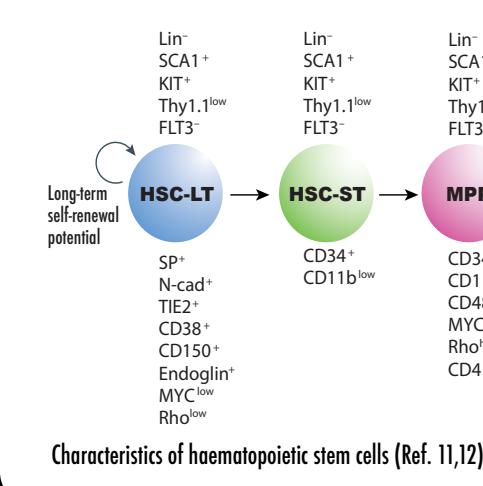


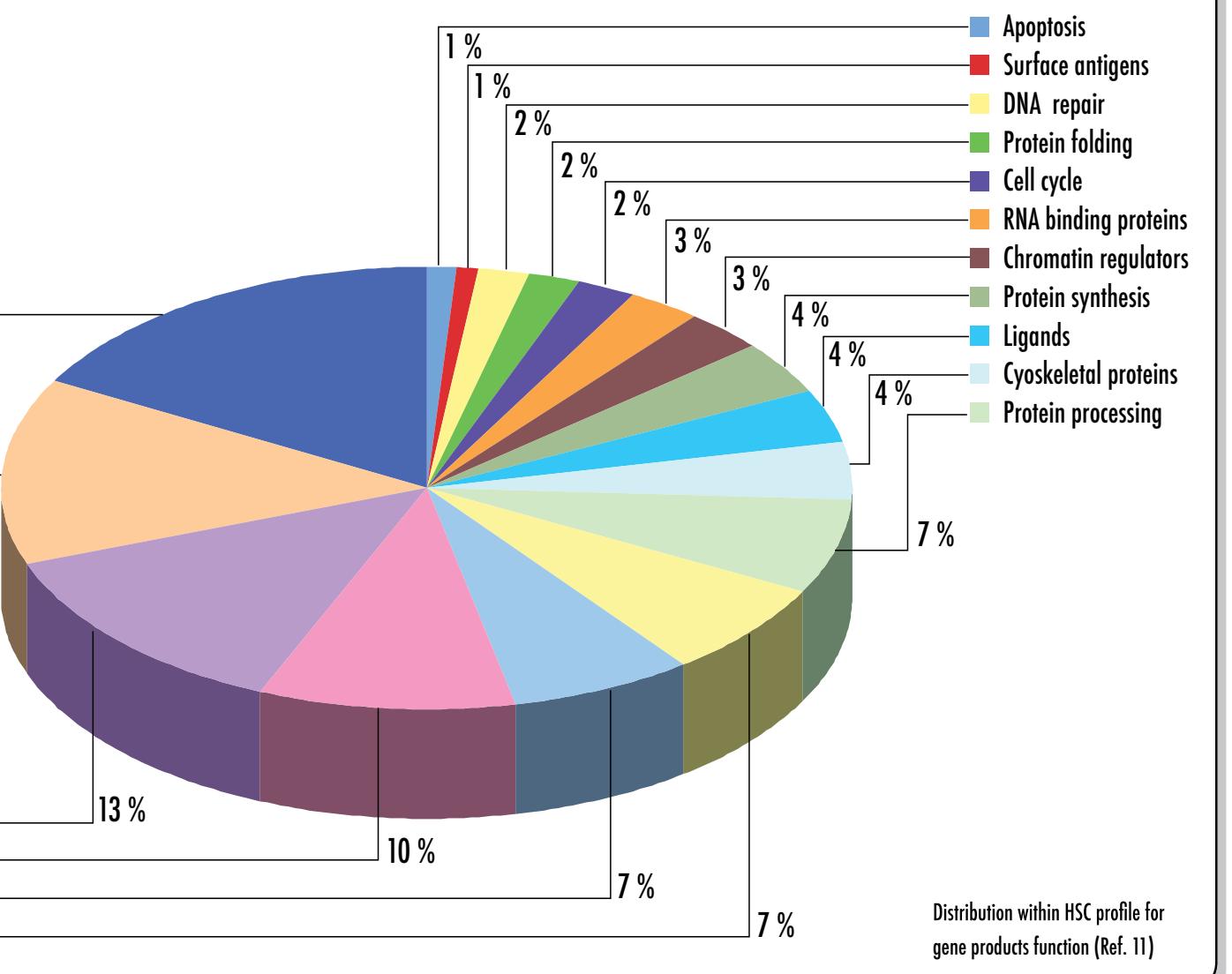
Distribution



Distribution of gene products between HSC subtypes (Ref. 11,12)

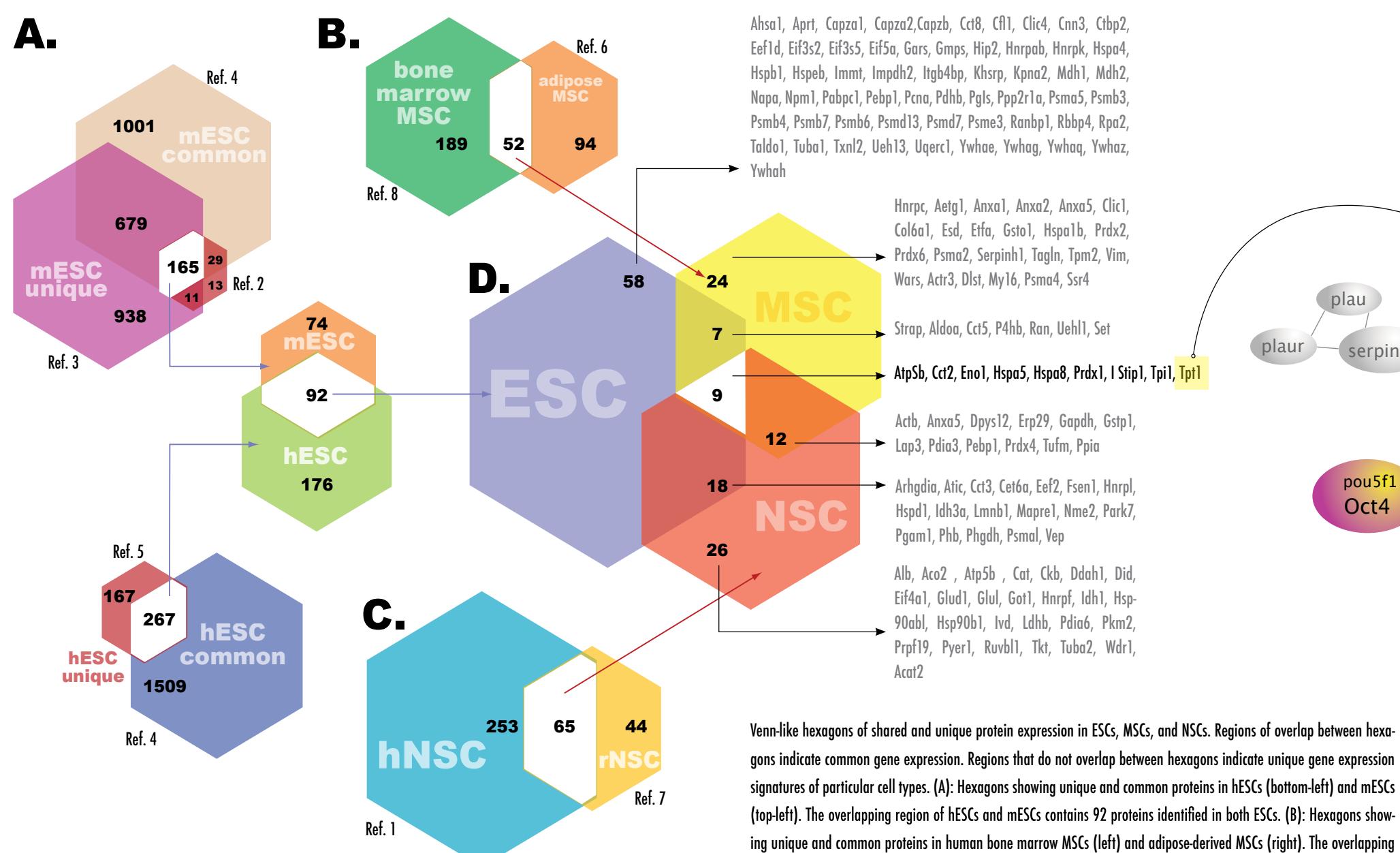


Characteristics of haematopoietic stem cells (Ref. 11,12)

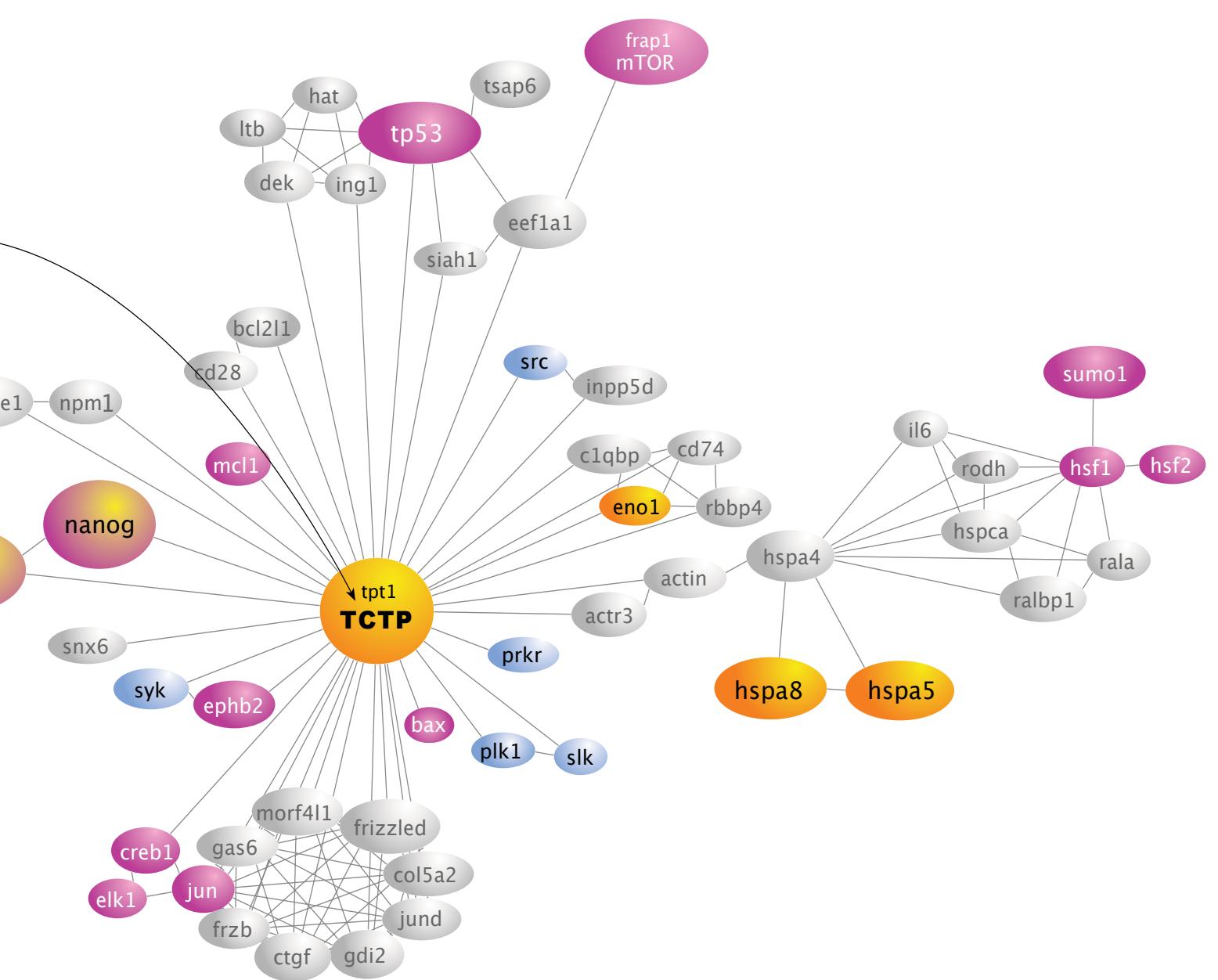


Distribution within HSC profile for gene products function (Ref. 11)

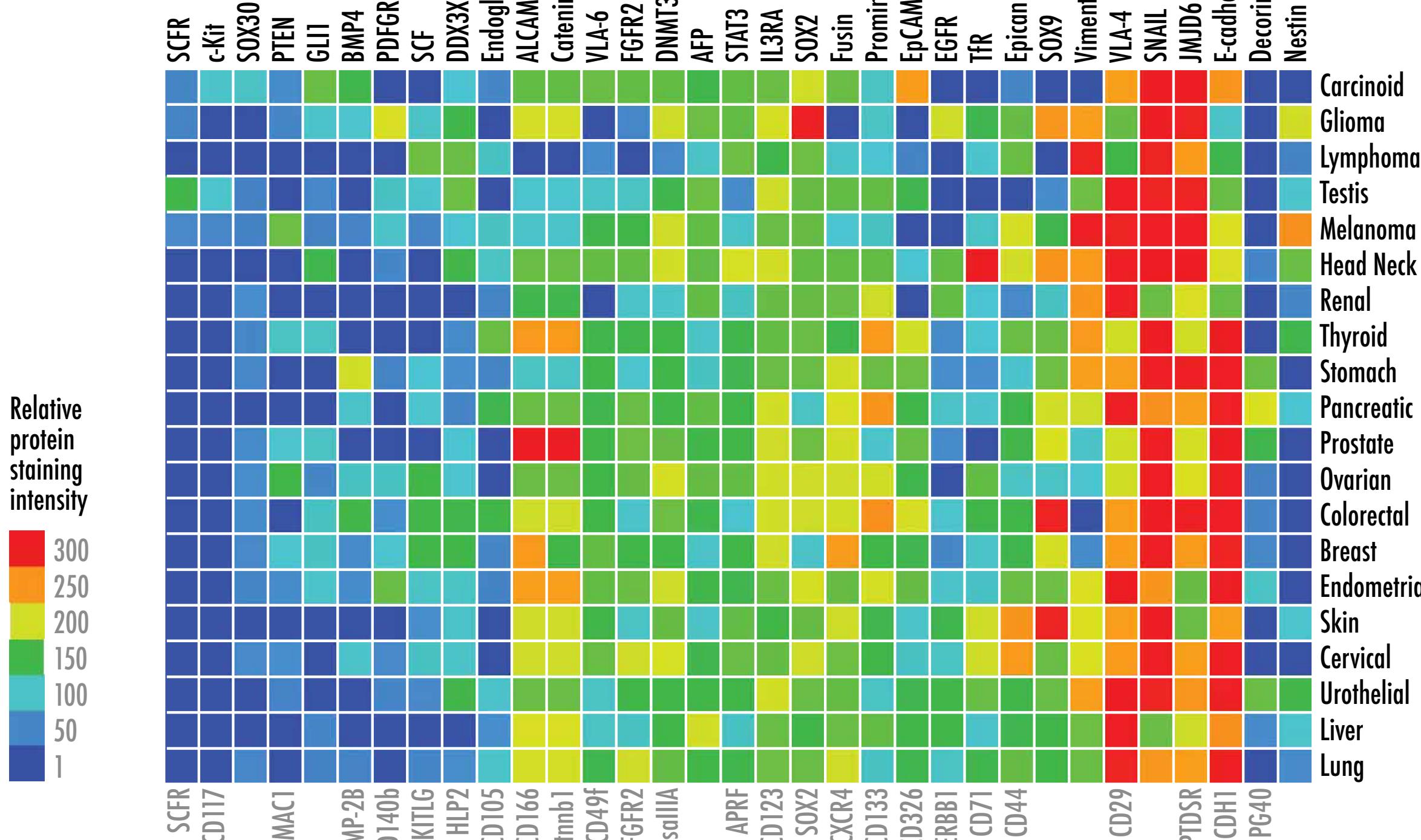
Associations



NSCs (left) and rat NSCs (right). The overlapping hexagons indicate 65 proteins identified in both NSCs. (D): hexagons showing unique and common proteins in ESCs, MSCs, and NSCs. The overlapping hexagons indicate nine proteins expressed in all three stem cell types. The gene symbols of SCs specific and common proteins are indicated on the right. The three SC types (ESCs, MSCs, and NSCs) shared nine proteins identified in proteomics screens, including proteins involved in energy production and metabolism.


TCTP Literature Network: Generated using a Tctp1-query to PubMed ("Tctp1 OR TCTP OR "Heat-inducible", 7/30/2001-8) resulting in 244 abstracts that were interpreted as a hierarchical hyper-graph using Cytoscape V2.2. yfiles/circular layout (<http://www.cytoscape.org>, Ref. 9) with a lexically-driven XML plug-in to the Agilent Literature Search (<http://www.agilent.com>, Ref. 10), and color coded in Adobe Illustrator CS2 (<http://www.adobe.com>).

Profiling

500+ additional stem cell Abs at www.abgent.com

An algorithm extracting scored cancer tissue-specific average staining intensity was implemented on data resident at the Human Protein Atlas (www.proteinatlas.org). Data points were then clustered using Statistica V7 (www.statsoft.com): the linkage along both axis was 'weighted pair-group centroid (median)', and distances were 1/ for tissues - '1-Pearson r' and 2/ for stem cell markers - 'Euclidean'. The clustered matrix was visualized using MatrixViewer V5 (developed by the PMAP team at The Burnham Medical Institute, www.burnham.org).

Distribution of stem cell proteins in cell subtypes and across cellular function
Associations of stem cell proteins in major tissue types and among each other
Profiling of stem cell markers in cancer tissues via antibodies

Abbreviations & References

SCFR, Human ESC; **mESC**, mouse ESC; **SP**, side-population ability; **Lin**, stem-cell antigen 1; **ET13**, fms-related tyrosine kinase 3; **N-cad**, N-cadherin; **SCF**, membrane-bound stem cell factor also known as KIT ligand; **TI2E**, tyrosine kinase receptor 2; **Atp5b**, ATP synthase chain; **Eno1**, Enolase 1; **Tpi1**, Triosephosphate-isomerase; **Stip1**, stress-induced-phosphoprotein 1; **Cat2**, peroxiredoxin 1; **Hsp8**, heat-shock protein 8-kDa glucose-regulated protein precursor; **Hsp8**, subunit I and heat shock cognate 71-kDa protein, an oncosis protein; **Tpt1**, translationally controlled tumor protein or TCP; **Otx4**, Pou domain-containing transcription factor encoded by Pou5f1 gene; **FRAP1**, mammalian target of rapamycin 1; **SUMO1**, Small ubiquitin-related modifier 1; **Sentrin**, Ubiquitin-like protein SMT3; **GAP**-modifying protein 1, UBL1, P1C1, GMPI; **MCL1**, induced myeloid leukemia cell differentiation protein Mcl-1; **Bcl-2**-related protein EAT/Mcl-1; **SLK**, Proto-oncogene tyrosine-protein kinase SLK; **SYK**, spleen tyrosine kinase; **PTEN**, phosphatase and tensin homologue deleted from chromosome 10; **DDX3X**, DEAD (Asp-Glu-Ala-Asp) box polypeptide 3X; **SOX9**, SRY (sex determining region Y)-box 9; **SOX2**, SRY (sex determining region Y)-box 2; **BMP4**, Bone morphogenic protein 4; **AFP**, Alpha-fetoprotein; **TFR**, Transferrin Receptor (CD71).

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