

Supplemental Data

Materials and Methods

Use of emPAI for relative label-free protein quantification

EmPAI quantification method was first developed by Ishihama et al. They have termed emPAI as exponentially modified protein abundance index. The authors have showed that the emPAI value is directly proportional to the protein quantity. Mascot search report automatically calculates the emPAI value for each protein identified. The emPAI values are calculated for an individual protein identification using the following equation:

$$emPAI = 10^{(Nobsd/Nobsbl)} - 1,$$

where *Nobsd* is the number of observed and *Nobsbl* the number of observable peptides per protein. *Nobsd* includes only peptide matches with scores at or above the homology threshold or the identity threshold (in the absence of the former). To estimate the *Nobsbl*, Ishihama et. al. performed *in silico* digests of various protein sequences. The peptide list was then filtered to exclude peptides outside the mass spectrometer scan range and the observed nano-LC retention time range. In slight difference to the original method, mascot algorithm calculates an estimate of the *Nobsbl* based on the protein mass, the average amino acid composition of the database, and the enzyme specificity.

Figures

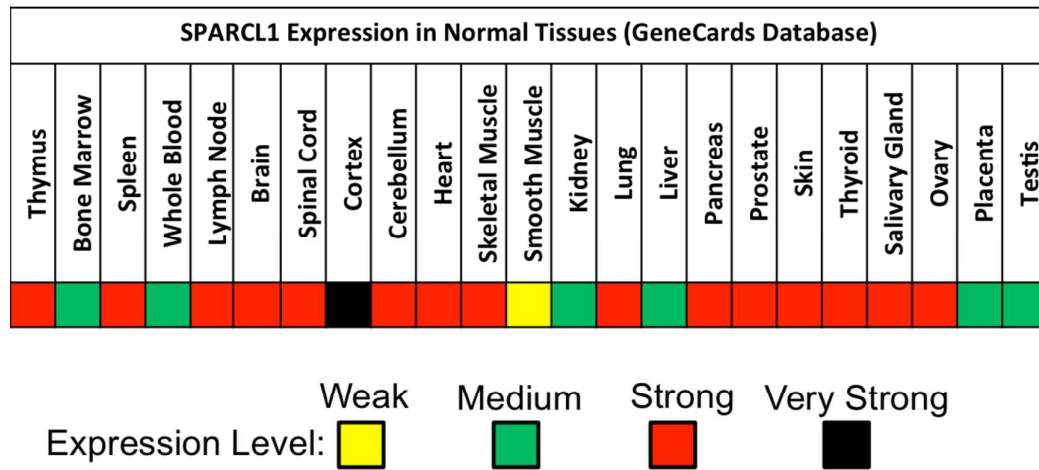


Figure S1: SPARCL1 mRNA expression in 23 normal tissues investigated *in silico* according to Affymetrix HG-U95A-E and HG-U133A Gene Chips measurements presented on the Gene Cards database (<http://www.genecards.org/>). In most normal tissues SPARCL1 appears to be strongly expressed. The color-coding indicates mRNA expression levels.

A

Protein name	Accession #	Protein name
<u>T98G</u>		
<u>Mouse</u>		
SRC8	Q60598	Src substrate cortactin
<u>SPRL1</u>	<u>P70663</u>	<u>Spark-like protein 1</u>
SC6A1	P31648	Sodium- and chloride-dependent GABA transporter 1
APOE	P08226	Apolipoprotein E
SAP	Q61207	Prosaposin
MRP	P28667	MARCKS-related protein
PICA	Q7M6Y3	Phosphatidylinositol-binding clathrin assembly protein
TKT	P40142	Transketolase
ITB1	P09055	Integrin beta-1
<u>Human</u>		
POTEE	Q6S8J3	POTE ankyrin domain family member E
CAC1S	Q13698	Voltage-dependent L-type calcium channel subunit alpha-1S
OPCM	Q14982	Opioid-binding protein/cell adhesion molecule
GDS1	P52306	Rap1 GTPase-GDP dissociation stimulator 1
PTPRZ	P23471	Receptor-type tyrosine-protein phosphatase zeta
PCDH1	Q08174	Protocadherin-1
BOD1L	Q8NFC6	Biorientation of chromosomes in cell division protein 1-like
S19A1	P41440	Folate transporter 1
DCD	P81605	Dermcidin
HBD	P02042	Hemoglobin subunit delta
FIBB	P02675	Fibrinogen beta chain
GNAI1	P63096	Guanine nucleotide-binding protein G(i) subunit alpha-1
<u>Common</u>		
K2C1	P04264/ P04104	Keratin, type II cytoskeletal 1
K1C13	P13646/ P08730	Keratin, type I cytoskeletal 13
FXYD6	Q9H0Q3/ Q9D164	FXYD domain-containing ion transport regulator 6

B

Gene name	Accession #	Protein name
<u>U373</u>		
<u>Mouse</u>		
<u>SPRL1</u>	<u>P70663</u>	<u>Spark-like protein 1</u>
UBQL2	Q9QZM0	Ubiquilin-2
CLD11	Q60771	Claudin-11
PPM1H	Q3UYC0	Protein phosphatase 1H
MAGI1	Q6RHR9	Membrane-associated guanylate kinase, WW and PDZ domain-containing protein 1
ITB1	P09055	Integrin beta-1
<u>Human</u>		
GDS1	P52306	Rap1 GTPase-GDP dissociation stimulator 1
POTEE	Q6S8J3	POTE ankyrin domain family member E
CAC1S	Q13698	Voltage-dependent L-type calcium channel subunit alpha-1S
OPCM	Q14982	Opioid-binding protein/cell adhesion molecule
PCDH1	Q08174	Protocadherin-1
BOD1L	Q8NFC6	Biorientation of chromosomes in cell division protein 1-like
PTPRZ	P23471	Receptor-type tyrosine-protein phosphatase zeta
HBB	P68871	Hemoglobin subunit beta
RCCD1	A6NED2	RCC1 domain-containing protein 1
POTEI	P0CG38	POTE ankyrin domain family member I
GNAI1	P63096	Guanine nucleotide-binding protein G(i) subunit alpha-1
AT2B3	Q16720	Plasma membrane calcium-transporting ATPase 3
AT2B1	P20020	Plasma membrane calcium-transporting ATPase 1
DLG2	Q15700	Disks large homolog 2
S4A4	Q9Y6R1	Electrogenic sodium bicarbonate cotransporter 1
S12A4	Q9UP95	Solute carrier family 12 member 4
<u>Common</u>		
K2C1	P04264/ P04104	Keratin, type II cytoskeletal 1
PICA	Q13492/Q7M6Y3	Phosphatidylinositol-binding clathrin assembly protein
2ABB	Q00005/Q6ZWR4	Serine/threonine-protein phosphatase 2A 55 kDa regulatory subunit B beta isoform
RB43L	A6NDJ8	Putative Rab-43-like protein ENSP00000330714
F123A	Q8N7J2/ Q8CCJ4	APC membrane recruitment protein 2
HXK3	P52790/ Q3TRM8	Hexokinase-3
MRP	P49006/P28667	MARCKS-related protein

Table S1A-B: Outline of protein names for each of the proteins indicated in the Table 1A-B.