

Supplemental Data

**Table S1. List of selected MV calcium-associated proteins during mineralization**

UniProt	Protein name	Gene name	Sequence	Mol. weight [kDa]	LFQ intensity ratio S/Non-s <sup>a</sup>	Function
O43852	Calumenin	CALU	DWILPSDYDHAEAEAR	38.05	25.98	CaBPs
P14625	Endoplasmic	HSP90B1	IYFMAGSSR	92.47	15.41	CaBPs
Q9Y6U3	Adseverin	SCIN	AGGVASGLNHVLTNDLTAK	80.49	5.15	CaBPs
P27824	Calnexin	CANX	GTLSGWILSK	67.57	5.01	CaBPs
P13797	Plastin-3	PLS3	INNFSADIK	70.81	5.00	CaBPs
P51571	Translocon-associated protein subunit delta	SSR4	SAHAGTYEVR	19.00	4.83	CaBPs
P26447	Protein S100-A4	S100A4	ALDVMVSTFHK	11.73	4.68	CaBPs
P11021	78 kDa glucose-regulated protein	HSPA5	LSSDKETMEK	72.33	4.45	CaBPs
P27797	Calreticulin	CALR	CKDDEFTHLYTLIVRPDNTYEVK	48.14	3.44	CaBPs
H0Y7A7	Calmodulin	CALM1	DGNKYISAAELR	20.76	3.44	CaBPs/ CaSP
P39900	matrix metalloproteinase 12	MMP12	NDPMLLYNK	85.51	3.41	CaBPs
P00742	Coagulation factor X	F10	ETYDFDIAVLR	54.73	2.80	CaBPs
Q02818	Nucleobindin-1	NUCB1	LQAANAEDIK	53.88	2.49	CaBPs
Q9UBG0	C-type mannose receptor 2	MRC2	LQGA VCGVSSGPPPPR	166.67	2.40	CaBPs
Q9H4M9	EH domain-containing protein 1	EHD1	ELVNNLGEIYQK	60.63	2.36	CaBPs
Q12907	Vesicular integral-membrane protein VIP36	LMAN2	DHDTFLAVR	40.23	2.21	CaBPs
Q10471	Polypeptide N-acetylgalactosaminyltransferase 2	GALNT2	HVGSNLCLDSR	64.73	2.20	CaBPs
P60903	Protein S100-A10 Ectonucleoside	S100A10	DPLAVDK	11.20	2.06	CaBPs
O75355	triphosphate diphosphohydrolase 3	ENTPD3	FTEETWPQIHFEK	59.10	2.06	CaBPs
P04083	Annexin A1	ANXA1	AAYLQETGK	38.71	1.72	CaBPs
P07355	Annexin A2	ANXA2	AEDGSVIDYELIDQDAR	40.41	1.51	CaBPs
P09525	Annexin A4	ANXA4	AEIDMLDIR	35.88	1.06	CaBPs
P08758	Annexin A5	ANXA5	ALLLLCGEDD	35.93	1.33	CaBPs
P08133	Annexin A6	ANXA6	CLIEILASR	75.28	1.24	CaBPs

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P20073	Annexin A7	ANXA7	CYQSEFGR	52.74	1.20	CaBPs
P50995	Annexin A11	ANXA11	DAQELYAAGENR	54.39	0.91	CaBPs
P31949	Protein S100-A11	S100A11	ISSPTETER	11.74	1.58	CaBPs
Q99584	Protein S100-A13	S100A13	KDSLVSNEFK	11.47	1.27	CaBPs
P06703	Protein S100-A6	S100A6	LMEDLDR	10.18	1.06	CaBPs
O43795	Unconventional myosin-Ib	MYO1B	VLYQVEGFVVK	131.98	3.17	CaMBPs
P29966	Myristoylated alanine-rich C-kinase substrate	MARCKS	PGEAAVASSPSK	31.55	2.49	CaMBPs
P46940	Ras GTPase-activating-like protein IQGAP1	IQGAP1	HTDNVIQWLNAMDEIGL PK	189.25	1.98	CaMBPs
O00159	Unconventional myosin-Ic	MYO1C	CPENAFFLDHVR	121.68	4.24	CaMBPs
P12236	ADP/ATP translocase 3	SLC25A6	EQGVLSFWR	32.87	9.73	CaSP
P05141	ADP/ATP translocase 2	SLC25A5	DFLAGGVAAAISK	32.85	5.07	CaSP
P21796	Voltage-dependent anion-selective channel protein 1	VDAC1	GYGFGLIK	30.77	4.21	CaSP
P29992	Guanine nucleotide-binding protein subunit alpha-11	GNA11	LLLLGTGESGK	42.12	4.13	CaSP
P50148	Guanine nucleotide-binding protein G(q) subunit alpha	GNAQ	LLLLGTGESGK	42.14	3.55	CaSP
P45880	Voltage-dependent anion-selective channel protein 2	VDAC2	WCEYGLTFTEK	31.57	3.24	CaSP

<sup>a</sup> LFQ intensity ratio S/Non-s: the ratio of the change in up/down-regulated protein on MVs from stimulated Saos-2 cells versus that from non-stimulated Saos-2 cells.