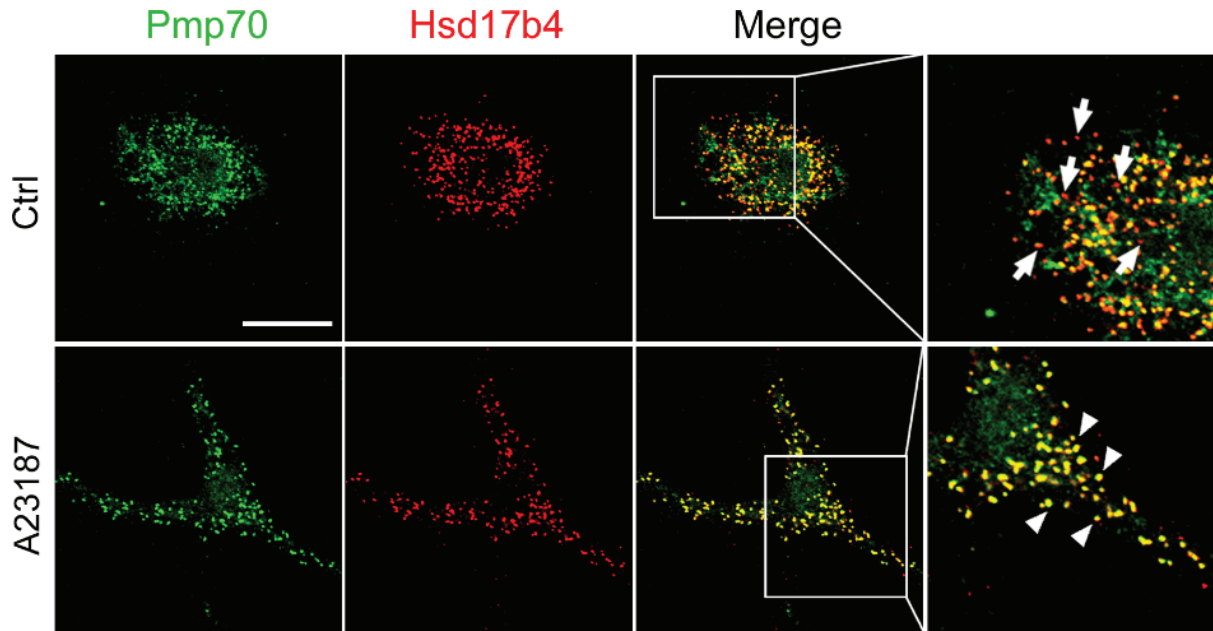
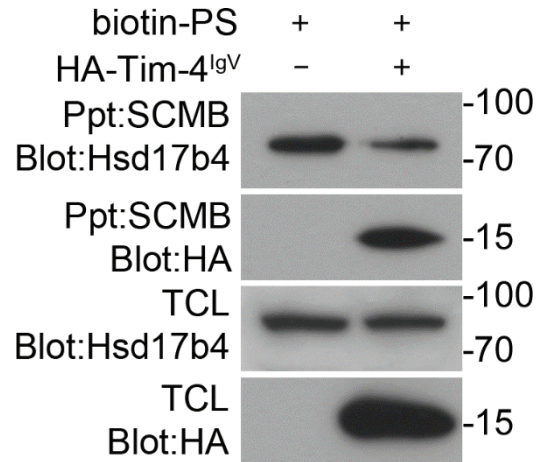


Supplementary Table S1. Identified proteins by LC-MS analysis

Sample	No.	SWISSPROT	Protein name	Organism species	Gene name	Protein existence	Sequence version	Score	Mass
1	1	DHB4_MOUSE	Peroxisomal multifunctional enzyme type 2	Mus musculus	Hsd17b4	1	3	380	79995
	2	HP1B3_MOUSE	Heterochromatin protein 1-binding protein 3	Mus musculus	Hp1bp3	1	1	191	61098
	3	GRP78_MOUSE	78 kDa glucose-regulated protein	Mus musculus	Hspa5	1	3	145	72543
	4	LDHA_MOUSE	L-lactate dehydrogenase A chain	Mus musculus	Ldha	1	3	124	36844
	5	G3P_MOUSE	Glyceraldehyde-3-phosphate dehydrogenase	Mus musculus	Gapdh	1	2	111	36099
	6	K2C5_MOUSE	Keratin, type II cytoskeletal 5	Mus musculus	Krt5	1	1	84	62014
	7	K22E_MOUSE	Keratin, type II cytoskeletal 2 epidermal	Mus musculus	Krt2	1	1	47	71391
	8	WASF2_MOUSE	Wiskott-Aldrich syndrome protein family member 2	Mus musculus	Wasf2	1	1	44	54305
	9	LIMA1_MOUSE	LIM domain and actin-binding protein 1	Mus musculus	Lima1	1	3	41	84706
	10	ROA2_MOUSE	Heterogeneous nuclear ribonucleoproteins A2/B1	Mus musculus	Hnmpa2b1	1	2	40	37464
	11	HNRPM_MOUSE	Heterogeneous nuclear ribonucleoprotein M	Mus musculus	Hnrmpm	1	3	39	77984
	12	K1C13_MOUSE	Keratin, type I cytoskeletal 13	Mus musculus	Krt13	1	2	39	48112
	13	IIGP5_MOUSE	Interferon-inducible GTPase 5	Mus musculus	Irgc	2	1	30	45477
	14	VASH1_MOUSE	Vasohibin-1	Mus musculus	Vash1	2	4	25	42036
	15	RL7_MOUSE	60S ribosomal protein L7	Mus musculus	Rpl7	1	2	24	31475
	16	KIF3A_MOUSE	Kinesin-like protein KIF3A	Mus musculus	Kif3a	1	2	22	80524
	17	H2B1A_MOUSE	Histone H2B type 1-A	Mus musculus	Hist1h2ba	1	3	20	14290
	18	COQ6_MOUSE	Ubiquinone biosynthesis monooxygenase COQ6	Mus musculus	Coq6	1	3	19	51671
	19	PKD2_MOUSE	Polycystin-2	Mus musculus	Pkd2	1	2	15	109671
	20	MSD2_MOUSE	Myb/SANT-like DNA-binding domain-containing protein 2	Mus musculus	Msantd2	1	1	13	61994
2	1	IQGA1_MOUSE	Ras GTPase-activating-like protein IQGAP1	Mus musculus	Iqgap1	1	2	121	189622
	2	ROA2_BOVIN	Heterogeneous nuclear ribonucleoproteins A2/B1	Bos taurus	HNRNPA2B1	2	1	92	36069
	3	FLNB_MOUSE	Filamin-B	Mus musculus	Flnb	1	3	87	280260
	4	FLNB_HUMAN	Filamin-B	Homo sapiens	FLNB	1	2	87	280314
	5	LDHA_ALLMI	L-lactate dehydrogenase A chain	Alligator mississippiensis	LDHA	2	3	85	37063
	6	MYH9_MOUSE	Myosin-9	Mus musculus	Myh9	1	4	71	227653
	7	VIME_CRIGR	Vimentin (Fragment)	Cricetulus griseus	VIM	2	1	53	51929
	8	ALBU_BOVIN	Serum albumin	Bos taurus	ALB	1	4	52	71278
	9	K22E_HUMAN	Keratin, type II cytoskeletal 2 epidermal	Homo sapiens	KRT2	1	2	49	65733
	10	FLNA_HUMAN	Filamin-A	Homo sapiens	FLNA	1	4	49	283470
	11	DOCK2_MOUSE	Dedicator of cytokinesis protein 2	Mus musculus	Dock2	1	3	48	213096
	12	ATPG_BOVIN	ATP synthase subunit gamma, mitochondrial	Bos taurus	ATP5C1	1	3	46	33127
	13	SCP_CHIOP	Sarcoplasmic calcium-binding protein (Fragment)	Chionoecetes opilio		1	1	43	842
	14	SERPH_BOVIN	Serpin H1	Bos taurus	SERPINH1	2	1	35	46615
	15	RS6_ASPOF	40S ribosomal protein S6	Asparagus officinalis	rps6	2	1	35	28755
	16	C2D2A_HUMAN	Coiled-coil and C2 domain-containing protein 2A	Homo sapiens	CC2D2A	1	3	33	186898
	17	RS8_METS5	30S ribosomal protein S8	Metallosphaera sedula (strain ATCC 51363 / DSM 5348)	rps8	3	1	33	15220
	18	FLIG_PSEAE	Flagellar motor switch protein FlIG	Pseudomonas aeruginosa (strain ATCC 15692 / PAO1 / 1C / PRS 101 / LMG 12228)	fliG	3	2	31	37010
	19	NUD19_MUSSA	Nucleoside diphosphate-linked moiety X motif 19, mitochondrial	Mus saxicola	Nudt19	2	1	31	40669
	20	TBB6_CHICK	Tubulin beta-6 chain	Gallus gallus		1	1	30	50738
	21	TBB_ENTDO	Tubulin beta chain	Enterococcus faecium		2	1	30	50914
	22	RT04_MARPO	Ribosomal protein S4, mitochondrial	Marchantia polymorpha	RPS4	3	2	27	23565
	23	ANXA2_BOVIN	Annexin A2	Bos taurus	ANXA2	1	2	27	38896
	24	RS4X_CHLAE	40S ribosomal protein S4, X isoform	Chlorocebus aethiops	RPS4X	2	3	26	29820
	25	RS4_LYTE	40S ribosomal protein S4	Lysiphlebus testaceipes	RpS4	2	1	26	29713
	26	EIF3I_BOVIN	Eukaryotic translation initiation factor 3 subunit I	Bos taurus	EIF3I	2	1	22	36875
	27	RFPL2_HUMAN	Ret finger protein-like 2	Homo sapiens	RFPL2	2	3	22	43104
	28	G3P_CHICK	Glyceraldehyde-3-phosphate dehydrogenase	Gallus gallus	GAPDH	2	3	21	35931
	29	G3P_MOUSE	Glyceraldehyde-3-phosphate dehydrogenase	Mus musculus	Gapdh	1	2	21	36099
	30	RPOC2_CHAGL	DNA-directed RNA polymerase subunit beta"	Chaetosphaeridium globosum	rpoC2	3	1	19	159406
	31	SCNA_ELEEL	Sodium channel protein	Electrophorus electricus		2	1	17	210391



**Supplementary Fig. S1. PS exposure promotes colocalization of Hsd17b4 with Pmp70.** BMDMs treated with A23187 (10  $\mu$ M) were incubated with anti-Hsd17b4 and anti-Pmp70 antibodies and then stained with Alexa Fluor 488- and Alexa Fluor 594-conjugated secondary antibodies. Images were acquired by confocal microscopy. Arrowheads indicate puncta where Hsd17b4 colocalizes with Pmp70 and arrows indicate puncta where Hsd17b4 does not colocalize with Pmp70. Ctrl, control. Scale bar = 20  $\mu$ m.



**Supplementary Fig. S2. Tim-4<sup>IgV</sup> inhibits interaction between Hsd17b4 and PS.** 293T cells transfected with the indicated plasmids were lysed, and the lysates were incubated with SCMBs and biotin-PS for 2 h. Bound proteins were separated by SDS-PAGE and detected by immunoblotting with the indicated antibodies.