

**Supplementary Table 1.** List of proteins with significant change in relative abundances in the eye wash samples from SPF SW and SPF C57BL6/N mice. Data are presented as fold differences in levels of SPF SW versus SPF C57BL6/N proteins and corresponding p-value.

Gene name	Protein names	(-)log10 (p-value)	Fold difference
<b>Igha</b>	<b>Ig alpha chain C1 region</b>	1.76	6.56
	Uncharacterized protein C2orf47 homolog, mitochondrial	2.66	5.88
Gm1330		2.19	5.81
<b>Igha</b>	<b>Ig alpha chain C2 region</b>	1.13	4.55
Calml1	Calmodulin	2.13	4.44
Chn1		1.63	4.18
Mpst	3-mercaptopyruvate sulfurtransferase	0.83	4.07
H2afx	Histone H2AX	0.96	3.95
Igkc	Ig kappa chain C region	0.88	3.91
Mup1	Major urinary protein 1	1.29	3.85
Ctsz	Cathepsin Z	1.43	3.73
Bglap	Osteocalcin-related protein	1.48	3.71
Ldhd	L-lactate dehydrogenase B chain	2.39	3.64
Isg15	Ubiquitin-like protein ISG15	1.86	3.47
Psmc2	Proteasome subunit alpha type-2	2.53	3.45
Ovos	Ovostatin homolog	1.46	3.45
<b>Igj</b>	<b>Immunoglobulin J chain</b>	0.88	3.43
Lcn11	Lipocalin	1.08	3.33
Ephx1	Epoxide hydrolase 1	1.07	3.18
Psmc1	Proteasome subunit beta type-1	0.79	3.09
Mia3	Melanoma inhibitory activity protein 3	2.44	3.08
Trim16	Tripartite motif-containing protein 16	3.54	3.07
Eps811	Epidermal growth factor receptor kinase substrate 8-like protein 1	1.08	3.07
Syne1	Nesprin-1	1.31	3.07
Oxr1	Oxidation resistance protein 1	0.94	3.06
Lzic	Protein LZIC	2.19	3.04
Xpnpep1	Xaa-Pro aminopeptidase 1	0.99	2.99
Capza1	F-actin-capping protein subunit alpha-1	1.85	2.99
Spr	Sepiapterin reductase	2.00	2.96
Mug1	Murinoglobulin-1	0.84	2.93
Rnf114	E3 ubiquitin-protein ligase RNF114	1.51	2.93
Sval3		1.02	2.86
Lypla2	Acyl-protein thioesterase 2	1.26	2.82

Nars	Asparagine--tRNA ligase, cytoplasmic	1.88	2.75
Apip	Methylthioribulose-1-phosphate dehydratase	2.00	2.74
Mydgf	UPF0556 protein C19orf10 homolog	1.44	2.73
Klk1b9	Kallikrein 1-related peptidase b9	1.80	2.64
Ube2v1	Ubiquitin-conjugating enzyme E2 variant 1	0.98	2.62
Rpl13a	60S ribosomal protein L13a	0.95	2.61
Tmprss11g	Transmembrane protease serine 11G	1.63	2.60
Isoc1	Isochorismatase domain-containing protein 1	2.03	2.59
Alpl	Alkaline phosphatase, tissue-nonspecific isozyme	1.06	2.57
Uso1	General vesicular transport factor p115	2.36	2.56
Pafah1b3	Platelet-activating factor acetylhydrolase IB subunit gamma	1.60	2.56
Slc3a2	4F2 cell-surface antigen heavy chain	1.92	2.52
Rps10	40S ribosomal protein S10	1.71	2.40
Azgp1	Zinc-alpha-2-glycoprotein	1.86	2.35
Rps7	40S ribosomal protein S7	1.75	2.33
Qdpr	Dihydropteridine reductase	1.09	2.30
Chmp5	Charged multivesicular body protein 5	1.76	2.30
Grn	Granulins	1.88	2.28
Hp1bp3	Heterochromatin protein 1-binding protein 3	1.33	2.27
Prep	Prolyl endopeptidase	1.22	2.25
Ctsl	Cathepsin L1	1.05	2.25
Csrp1	Cysteine and glycine-rich protein 1	1.29	2.21
Atp6v1a	V-type proton ATPase catalytic subunit A	1.42	2.21
RbmX	RNA binding motif protein, X-linked-like-1	1.27	2.16
Smap	Small acidic protein	1.59	2.07
Nudt10	Diphosphoinositol polyphosphate phosphohydrolase 2	1.25	2.06
Hexb	Beta-hexosaminidase subunit beta	2.21	2.06
Eif3i	Eukaryotic translation initiation factor 3 subunit I	1.21	1.99
F5	Coagulation factor V	1.37	1.99
Naprt	Nicotinate phosphoribosyltransferase	1.86	1.92
Txndc12	Thioredoxin domain-containing protein 12	1.23	1.89
Impa1	Inositol monophosphatase 1	2.10	1.77
Anxa6	Annexin A6	1.73	1.53
Kars	Lysine-tRNA ligase	3.21	1.35
Rps27l	40S ribosomal protein S27-like	2.55	-1.66
S100a8	Protein S100-A8	3.99	-2.16
S100a9	Protein S100-A9	1.10	-2.22
Scgb1b12	Secretogloin 1b12	1.22	-2.32
Myl12b	Myosin regulatory light chain 12B	1.38	-2.70
Rpl14	60S ribosomal protein L14	0.78	-3.68
Adh6a	Aldehydedehydrogenase 6a	2.56	-4.90
Fgg	Fibrinogen gamma chain	2.00	-6.46