

## Supplementary data

**Supplementary Table S1.** Proteins with different relative abundances in the saliva of the piglets with meningitis (MP) and healthy piglets (HP).

Accession ID	Gene	Description	FC	Log2FC	P-value	FDR
<i>Higher relative abundance in MP</i>						
A0A4X1SRF3	VCL	Metavinculin	1.62	0.70	0.002	0.017
A0A287A191	DSC2	Desmocollin 2	1.58	0.66	0.004	0.023
A0A287ALC1	IGHM	Immunoglobulin heavy constant mu	1.57	0.65	0.003	0.018
A0A4X1U0N5	ALDOA	Fructose-bisphosphate aldolase	1.56	0.64	0.002	0.017
A0A4X1TUX8	SERPINB12	SERPIN domain-containing protein	1.53	0.61	0.003	0.018
A0A4X1SFT0	ECM1*	Extracellular matrix protein 1*	1.50	0.58	0.007	0.033
A0A4X1VL50	DSG3*	Desmoglein 3*	1.45	0.54	0.008	0.035
A0A4X1TTU1	ADA*	Adenosine aminohydrolase*	1.39	0.48	0.011	0.045
A0A287A6P1	GSN	Actin-depolymerizing factor	1.38	0.46	0.002	0.017
F1RFV3	VMO1	Vitelline membrane outer layer protein 1	1.30	0.38	0.006	0.030
Q4A3R3-2	DMBT1	Isoform 2 of Deleted in malignant brain tumors 1 protein	1.22	0.29	0.011	0.045
<i>Lower abundance in MP</i>						
A0A5G2R5N9	TF	Serotransferrin	0.86	-0.22	0.002	0.017
F1SGG3	KRT1	Cytokeratin-1	0.80	-0.32	0.001	0.013
P81245	OBP*	Odorant-binding protein*	0.79	-0.34	0.011	0.045
A0A5G2QYD6	HRG	Cystatin domain-containing protein	0.72	-0.47	0.002	0.017
A0A4X1TA63	CHIA	Chitinase	0.69	-0.54	0.001	0.013
K7GM40	APOA1	Apolipoprotein A-I	0.68	-0.56	0.001	0.013
A0A4X1W8Z7	A1BG*	Alpha-1B-glycoprotein*	0.63	-0.67	0.006	0.030
A0A287B057	OBP2B	Lipocln_cytosolic_FA-bd_dom domain-containing protein	0.59	-0.76	< 0.001	0.013
P02067	HBB	Hemoglobin subunit beta	0.55	-0.86	0.001	0.013
A0A4X1T2P9	LOC100739218	Double-headed protease inhibitor, submandibular gland-like	0.33	-1.60	< 0.001	0.013

FC – fold change, calculated as median (Group MP)/median (Group HP); FDR– false discovery rate; \* after blasting in UniProt



A0A286ZYZ 5	LOC106504547	SERPIN domain-containing protein	2.03	1.02	< 0.001	0.005
Q8SPS7	HP	Haptoglobin	1.81	0.85	< 0.001	< 0.001
O19063	APCS	Serum amyloid P-component	1.70	0.77	< 0.001	< 0.001
A0A4X1SH9 2	LOC396684*	SERPIN domain-containing protein	1.50	0.58	< 0.001	< 0.001
A0A4X1TJP8	LBP	Lipopolysaccharide-binding protein	1.45	0.54	0.002	0.015
F1SCC6	LOC100156325	SERPIN domain-containing protein	1.43	0.52	< 0.001	< 0.001
A0A4X1T8C9	CPN2*	Carboxypeptidase N subunit 2	1.23	0.30	0.010	0.047
<i>Lower abundance in MP</i>						
K7GPT9	CFB	C3/C5 convertase	0.92	-0.12	0.009	0.046
A2THZ2	ALB*	Albumin (Fragment)	0.86	-0.22	0.005	0.034
A0A480KXE 8	MGAM*	Maltase-glucoamylase, intestinal	0.80	-0.33	0.002	0.015
A0A480QPG 5	HGFAC*	Hepatocyte growth factor activator isoform 2 preproprotein	0.80	-0.31	0.001	0.012
A0A5S8KLN 1	CLU	Clusterin	0.78	-0.36	0.007	0.040
A0A480SQD 8	ITIH1*	Inter-alpha-trypsin inhibitor heavy chain H1 isoform	0.77	-0.39	< 0.001	< 0.001
A0A480RB65	TF*	Serotransferrin	0.77	-0.37	0.001	0.009
A0A4X1W71 8	AponN*	Beta-1 metal-binding globulin	0.77	-0.38	0.001	0.009
A0A4X1W7I 8	ApoN*	Ovarian and testicular apolipoprotein N	0.75	-0.42	0.009	0.047
P48819	VTN	Vitronectin	0.74	-0.44	< 0.001	0.005
A0A5G2QEV 5	ITIH2	Inter-alpha-trypsin inhibitor heavy chain H2	0.74	-0.43	< 0.001	0.005
K7GM40	APOA1	Apolipoprotein A-I	0.68	-0.57	0.007	0.040
A0A481B9A6	HRG*	Histidine-rich glycoprotein	0.58	-0.78	< 0.001	0.003
FC – fold change, calculated as median (Group MP)/median (Group HP); FDR– false discovery rate; * after blasting in UniProt						

**Supplementary Table S4.** Gene Ontology for the serum proteins with the different abundance between piglets with meningitis and healthy piglets.

Ontology	Description	Genes	
		Number of genes	% of genes
Molecular Function	binding (GO:0005488)	8	27.6
	molecular function regulator (GO:0098772)	4	13.8
	catalytic activity (GO:0003824)	8	27.6
Biological Process	cellular process (GO:0009987)	9	31.0
	localization (GO:0051179)	6	20.7
	biological process involved in interspecies interaction between organisms (GO:0044419)	5	17.2
	biological regulation (GO:0065007)	8	27.6
	response to stimulus (GO:0050896)	9	31.0
	signaling (GO:0023052)	1	3.4
	developmental process (GO:0032502)	2	6.9
	multicellular organismal process (GO:0032501)	2	6.9

	biological adhesion (GO:0022610)	2	6.9
	metabolic process (GO:0008152)	6	20.7
	growth (GO:0040007)	2	6.9
	immune system process (GO:0002376)	5	17.2
Cellular Component	cell periphery (GO:0071944)	7	38.9
	membrane (GO:0016020)	4	22.2
	cytoplasm (GO:0005737)	6	33.3
	external encapsulating structure (GO:0030312)	3	16.7
	extracellular region (GO:0005576)	18	100.0
	intracellular anatomical structure (GO:0005622)	6	33.3
	endomembrane system (GO:0012505)	4	22.2
	organelle (GO:0043226)	4	22.2
	extracellular space (GO:0005615)	18	100.0
Protein Class	transmembrane signal receptor (PC00197)	1	3.4
	transfer/carrier protein (PC00219)	8	27.6
	defense/immunity protein (PC00090)	1	3.4
	protein-binding activity modulator (PC00095)	8	27.6
	metabolite interconversion enzyme (PC00262)	1	3.4
	protein modifying enzyme (PC00260)	3	10.3