



Supplementary Figure S1. Main enriched pathways of significantly altered proteins in induced sputum (**a**) and serum (**b**) of patients with eosinophilic (blue), neutrophilic (purple) and mixed (yellow) asthma. The number of significantly different proteins associated with each pathway identified by the database Reactome is shown in the bar graph.

Supplementary Table S1. List of the significantly different proteins in induced sputum of patients with eosinophilic, neutrophilic, mixed and paucigranulocytic asthma.

Gene symbol	Description	Log Dif (E vs N)	Log Dif (E vs M)	Log Dif (E vs P)	Log Dif (N vs M)	Log Dif (N vs P)	Log Dif (M vs P)
<i>S100P</i>	Protein S100-P	-4,18***	-3,42**	NS	NS	NS	NS
<i>S100A8</i>	Protein S100-A8	-2,96*	-1,87*	NS	NS	4,38***	3,28***
<i>CAMP</i>	Cathelicidin antimicrobial peptide	-13,08*	NS	NS	NS	17,32**	13,25*
<i>PGLYRP1</i>	Peptidoglycan recognition protein 1	-12,46*	NS	NS	NS	14,92**	NS
<i>PIP</i>	Prolactin-inducible protein	-1,64*	-2,81***	NS	NS	NS	NS
<i>AMYA1</i>	Alpha-amylase 1	-4,046*	-5,55**	NS	NS	NS	2,93*
<i>CST4</i>	Cystatin-S	-2,10*	-2,76*	NS	NS	2,58**	3,23**
<i>KLK1</i>	Kallikrein-1	-2,78*	-3,11**	NS	NS	NS	1,58*
<i>TMSB4X</i>	Thymosin beta-4	-2,44*	NS	NS	NS	NS	NS
<i>CRISP3</i>	Cysteine-rich secretory protein 3	-1,67*	-1,80*	NS	NS	2,616*	2,74*
<i>GSTA1</i>	Glutathione S-transferase A1	11,84*	NS	NS	NS	NS	NS
<i>DSG3</i>	Desmoglein-3	NS	- 13,35**	NS	NS	NS	14,43**
<i>PRRL4</i>	Proline-rich protein 4	NS	-2,77*	NS	NS	NS	NS
<i>LPO</i>	Lactoperoxidase	NS	-1,29*	NS	NS	NS	NS
<i>BPIFA1</i>	BPI fold-containing family A member 1	NS	-10,70*	NS	-2,95*	NS	NS
<i>ZG16B</i>	Zymogen granule protein 16 homolog B	NS	-2,04*	NS	NS	NS	NS
<i>CA6</i>	Carbonic anhydrase 6	NS	-2,99*	NS	NS	NS	NS
<i>MIF</i>	Macrophage migration inhibitory factor	NS	12,84*	NS	13,86*	NS	NS
<i>MUC5AC</i>	Mucin-5AC	NS	NS	13,41*	NS	NS	NS
<i>SMR3B</i>	Submaxillary gland androgen-regulated protein 3B	NS	NS	3,23*	NS	2,82*	4,13**
<i>H1-5</i>	Histone H1.5	NS	NS	13,12*	NS	NS	NS
<i>LACRT</i>	Extracellular glycoprotein lacritin	NS	NS	13,34*	NS	NS	NS
<i>BASP1</i>	Brain acid soluble protein 1	NS	NS	11,47*	NS	NS	NS
<i>H1-2</i>	Histone H1.2	NS	NS	10,68*	NS	11,33*	NS
<i>IGHV3-66</i>	Immunoglobulin heavy variable 3-66	NS	NS	NS	-2,64*	NS	NS
<i>ANXA1</i>	Annexin A1	NS	NS	NS	2,47*	9,21*	NS
<i>ELANE</i>	Neutrophil elastase	NS	NS	NS	NS	4,23**	3,01**
<i>PRB1</i>	Basic salivary proline-rich protein 1	NS	NS	NS	NS	20,09**	NS
<i>APOA2</i>	Apolipoprotein A-II	NS	NS	NS	NS	15,08**	NS
<i>CTSG</i>	Cathepsin G	NS	NS	NS	NS	15,33**	13,77*
<i>CALML5</i>	Calmodulin-like protein	NS	NS	NS	NS	13,58**	13,48**

<i>DEFA3</i>	Neutrophil defensin 3	NS	NS	NS	NS	3,44**	2,90**
<i>MPO</i>	Myeloperoxidase	NS	NS	NS	NS	3,52*	2,88**
<i>LDHA</i>	L-lactate dehydrogenase A	NS	NS	NS	NS	12,41*	11,97*
<i>PRTN3</i>	Myeloblastin	NS	NS	NS	NS	3,26*	2,80**
<i>HBB</i>	Hemoglobin subunit beta	NS	NS	NS	NS	12,61*	NS
<i>ANXA2</i>	Annexin A2	NS	NS	NS	NS	10,96*	NS
<i>RETN</i>	Resistin	NS	NS	NS	NS	11,17*	NS
<i>S100A7</i>	Protein S100-A7	NS	NS	NS	NS	10,73*	9,99*
<i>CD44</i>	CD44 antigen	NS	NS	NS	NS	12,33*	NS
<i>ARHGDI B</i>	Rho GDP-dissociation inhibitor 2	NS	NS	NS	NS	9,70*	9,04*
<i>SPRR3</i>	Small proline-rich protein 3	NS	NS	NS	NS	9,44*	NS
<i>MMP9</i>	Matrix metalloproteinase-9	NS	NS	NS	NS	7,41*	7,04*
<i>DMBT1</i>	Deleted in malignant brain tumors 1 protein	NS	NS	NS	NS	NS	1,32*
<i>CD14</i>	Monocyte differentiation antigen CD14	NS	NS	NS	NS	NS	10,93*
<i>GAPDH</i>	Glyceraldehyde-3-phosphate dehydrogenase	NS	NS	NS	NS	NS	2,55*
<i>SH3BGR L3</i>	SH3 domain-binding glutamic acid-rich-like protein 3	NS	NS	NS	NS	NS	10,85*
<i>PRB2</i>	Basic salivary proline-rich protein 2	NS	NS	NS	NS	NS	13,17*
<i>GPI</i>	Glucose-6-phosphate isomerase	NS	NS	NS	NS	NS	11,04*
<i>HV64D</i>	Immunoglobulin heavy variable 3-64D	NS	NS	NS	NS	NS	10,74*
<i>CAP1</i>	Adenylyl cyclase-associated protein 1	NS	NS	NS	NS	NS	9,02*
<i>CSTA</i>	Cystatin-A	NS	NS	NS	NS	NS	11,31*

* p < 0,05. ** p < 0,01. *** p < 0,001.

E, eosinophilic asthma; N, neutrophilic asthma; P, paucigranulocytic asthma; M, mixed granulocytic asthma; NS, not significant.

Supplementary Table S2. List of the significantly different proteins in serum of patients with eosinophilic, neutrophilic, mixed and paucigranulocytic asthma.

Gene symbol	Description	Log Dif (E vs N)	Log Dif (E vs M)	Log Dif (E vs P)	Log Dif (N vs M)	Log Dif (N vs P)	Log Dif (M vs P)
<i>FCN3</i>	Ficolin-3	12,83*	9,55*	NS	NS	NS	NS
<i>CA1</i>	Carbonic anhydrase 1	NS	-3,20*	NS	NS	NS	NS
<i>C1QA</i>	Complement C1q subcomponent subunit A	NS	NS	NS	NS	NS	2,51*
<i>PF4</i>	Platelet factor 4	NS	-3,86**	NS	-3,22**	NS	NS
<i>VTN</i>	Vitronectin	NS	-1,15*	NS	-1,80**	NS	NS
<i>SHBG</i>	Sex hormone-binding globulin	NS	-2,88*	NS	NS	NS	NS
<i>THBS1</i>	Thrombospondin-1	NS	NS	10,92*	NS	NS	NS
<i>LAMP2</i>	Lysosome-associated membrane glycoprotein 2	NS	NS	NS	NS	NS	10,70*
<i>BTB</i>	Biotinidase	NS	NS	NS	NS	NS	2,00*
<i>CRISP3</i>	Cysteine-rich secretory protein 3	NS	-9,93*	NS	-8,58*	NS	NS
<i>TGFBI</i>	Transforming growth factor-beta-induced protein	NS	NS	NS	NS	NS	10,37*
<i>PRG4</i>	Proteoglycan 4	NS	NS	NS	NS	NS	8,32*

* $p < 0,05$. ** $p < 0,01$.

E, eosinophilic asthma; N, neutrophilic asthma; P, paucigranulocytic asthma; M, mixed granulocytic asthma; NS, not significant.