

Supplemental Data Table S3. Molecular functions and pathways of 23 genes related to the innate immune system identified in this study

Gene	Molecular function*	Pathway†
<i>ABCA13</i>	Enables ATP-binding cassette-type transporter activity	Neutrophil degranulation
<i>ALPK1</i>	Enables protein serine/threonine kinase activity	Alpha-protein kinase 1 signaling
<i>C4BPA</i>	Controls the classical pathway of complement activation	Complement cascade
<i>CAMP</i>	Binds to bacterial lipopolysaccharides and has antibacterial activity	Neutrophil degranulation, antimicrobial peptides
<i>CR1</i>	Membrane immune adherence receptor that plays a critical role in the capture and clearance of complement-opsonized pathogens by monocytes/macrophages	Neutrophil degranulation, complement cascade
<i>CRISP3</i>	Cysteine-rich secretory protein 3	Neutrophil degranulation
<i>FOLR3</i>	Binds to folate and reduced folic acid derivatives and mediates delivery of 5-methyltetrahydrofolate to the interior of cells	Neutrophil degranulation
<i>FOS</i>	Enables DNA-binding transcription factor activity, RNA polymerase II-specific	Toll-like receptor cascades, Fc epsilon receptor signaling, DDX58/IFIH1-mediated induction of interferon-alpha/beta
<i>HP</i>	Enables antioxidant activity	Neutrophil degranulation
<i>IL1B</i>	Pro-inflammatory cytokine	C-type lectin receptors
<i>LCN2</i>	Enables enterobactin binding	Neutrophil degranulation, antimicrobial peptides, cytokine signaling
<i>LRRC7</i>	Enables protein binding	Neutrophil degranulation
<i>MIF</i>	Pro-inflammatory cytokine involved in the innate immune response to bacterial pathogens	Neutrophil degranulation
<i>NLR4</i>	Key inflammasome component that indirectly senses specific proteins from pathogenic bacteria and fungi	Nucleotide-binding domain, leucine-rich repeat-containing receptor signaling; cytosolic signaling, C-type lectin receptors
<i>ORM1</i>	Enables protein binding	Neutrophil degranulation
<i>PGLYRP1</i>	Acts as a pattern receptor that binds to murein peptidoglycans of gram-positive bacteria and thus provides bactericidal activity	Neutrophil degranulation
<i>PYGL</i>	Enables protein binding	Neutrophil degranulation
<i>S100A12</i>	Pro-inflammatory activity involves recruitment of leukocytes, promotion of cytokine and chemokine production, and regulation of leukocyte adhesion and migration	Neutrophil degranulation, Toll-like receptor cascades, cytosolic signaling, advanced glycosylation end-product receptor signaling, DDX58/IFIH1-mediated induction of interferon-alpha/beta, alpha-protein kinase 1 signaling
<i>S100A8</i>	Calcium- and zinc-binding protein that plays a prominent role in the regulation of inflammatory processes and immune response	Neutrophil degranulation, Toll-like receptor cascades, antimicrobial peptides
<i>SERPINB10</i>	Protease inhibitor that may play a role in the regulation of protease activities during hematopoiesis and apoptosis induced by tumor necrosis factor	Neutrophil degranulation
<i>TCN1</i>	Enables protein binding	Neutrophil degranulation
<i>UBE2D1</i>	Enables ATP, protein binding	Toll-like receptor cascades, Fc epsilon receptor signaling, cytosolic signaling, DDX58/IFIH1-mediated induction of interferon-alpha/beta, alpha-protein kinase 1 signaling, C-type lectin receptors
<i>VNN1</i>	Enables pantetheine hydrolase activity	Neutrophil degranulation

*Molecular function information for each gene was obtained from UniProt (<https://www.uniprot.org/>) or the NCBI Gene Database (<https://www.ncbi.nlm.nih.gov/gene/>); †Reactome pathways (<https://reactome.org/>).