

SUPPLEMENTARY TABLES

Supplementary Table 1. 55 pyroptosis-related candidate genes.

| Gene symbol | Description | Category |
|--------------------|---|-----------------|
| AIM2 | Absent In Melanoma 2 | Protein Coding |
| ANO6 | Anoctamin 6 | Protein Coding |
| APIP | APAF1 Interacting Protein | Protein Coding |
| CAMP | Cathelicidin Antimicrobial Peptide | Protein Coding |
| CASP1 | Caspase 1 | Protein Coding |
| CASP3 | Caspase 3 | Protein Coding |
| CASP4 | Caspase 4 | Protein Coding |
| CASP5 | Caspase 5 | Protein Coding |
| CASP8 | Caspase 8 | Protein Coding |
| CPTP | Ceramide-1-Phosphate Transfer Protein | Protein Coding |
| CTSG | Cathepsin G | Protein Coding |
| DDX3X | DEAD-Box Helicase 3 X-Linked | Protein Coding |
| DHX9 | DExH-Box Helicase 9 | Protein Coding |
| EEF2K | Eukaryotic Elongation Factor 2 Kinase | Protein Coding |
| ELAVL1 | ELAV Like RNA Binding Protein 1 | Protein Coding |
| FADD | Fas Associated Via Death Domain | Protein Coding |
| FGF21 | Fibroblast Growth Factor 21 | Protein Coding |
| FOXO3 | Forkhead Box O3 | Protein Coding |
| GBP1 | Guanylate Binding Protein 1 | Protein Coding |
| GBP5 | Guanylate Binding Protein 5 | Protein Coding |
| GJA1 | Gap Junction Protein Alpha 1 | Protein Coding |
| GSDMA | Gasdermin A | Protein Coding |
| GSDMB | Gasdermin B | Protein Coding |
| GSDMC | Gasdermin C | Protein Coding |
| GSDMD | Gasdermin D | Protein Coding |
| GSDME | Gasdermin E | Protein Coding |
| GZMA | Granzyme A | Protein Coding |
| GZMB | Granzyme B | Protein Coding |
| HDAC6 | Histone Deacetylase 6 | Protein Coding |
| HMGB1 | High Mobility Group Box 1 | Protein Coding |
| IL18 | Interleukin 18 | Protein Coding |
| IL1B | Interleukin 1 Beta | Protein Coding |
| IL36B | Interleukin 36 Beta | Protein Coding |
| IL36G | Interleukin 36 Gamma | Protein Coding |
| IRF3 | Interferon Regulatory Factor 3 | Protein Coding |
| MALT1 | MALT1 Paracaspase | Protein Coding |
| MKI67 | Marker Of Proliferation Ki-67 | Protein Coding |
| MST1 | Macrophage Stimulating 1 | Protein Coding |
| NAIP | NLR Family Apoptosis Inhibitory Protein | Protein Coding |
| NLRC4 | NLR Family CARD Domain Containing 4 | Protein Coding |
| NLRP1 | NLR Family Pyrin Domain Containing 1 | Protein Coding |
| NLRP3 | NLR Family Pyrin Domain Containing 3 | Protein Coding |
| NLRP7 | NLR Family Pyrin Domain Containing 7 | Protein Coding |
| NLRP9 | NLR Family Pyrin Domain Containing 9 | Protein Coding |
| NR1H2 | Nuclear Receptor Subfamily 1 Group H Member 2 | Protein Coding |

| | | |
|--------|--|----------------|
| P2RX7 | Purinergic Receptor P2X 7 | Protein Coding |
| PARP1 | Poly(ADP-Ribose) Polymerase 1 | Protein Coding |
| PYCARD | PYD And CARD Domain Containing | Protein Coding |
| SQSTM1 | Sequestosome 1 | Protein Coding |
| STING1 | Stimulator Of Interferon Response CGAMP Interactor 1 | Protein Coding |
| STK4 | Serine/Threonine Kinase 4 | Protein Coding |
| TET2 | Tet Methylcytosine Dioxygenase 2 | Protein Coding |
| TP53 | Tumor Protein P53 | Protein Coding |
| TREM2 | Triggering Receptor Expressed On Myeloid Cells 2 | Protein Coding |
| ZBP1 | Z-DNA Binding Protein 1 | Protein Coding |

Supplementary Table 2. 15 pyroptosis-related gene-based signature.

| | exp(coef) | coef |
|-------|------------------|--------------|
| NLRC4 | 1.62847457 | 0.48764373 |
| GSDMC | 1.298640561 | 0.261317995 |
| DHX9 | 1.097058186 | 0.092632221 |
| FOXO3 | 1.081542489 | 0.078388253 |
| IL18 | 0.827962551 | -0.188787354 |
| GJA1 | 0.8021137 | -0.22050491 |
| TP53 | 1.19988773 | 0.182227994 |
| FGF21 | 1.141209354 | 0.132088537 |
| GBP1 | 0.656979238 | -0.420102863 |
| GZMB | 0.708450665 | -0.344674856 |
| MST1 | 0.772059504 | -0.258693655 |
| IRF3 | 1.456089864 | 0.375754667 |
| IL36B | 1.098408554 | 0.093862364 |
| IL36G | 0.852422168 | -0.159673372 |
| ANO6 | 1.324949323 | 0.281374212 |