**Supplementary Table 1**

The 146 pyroptosis-related genes.

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| Gene symbol | Gene description | Gene symbol | Gene description |
| GSDMD | Gasdermin D | MRE11 | MRE11 Homolog, Double Strand Break Repair Nuclease |
| GSDME | Gasdermin E | PARP1 | Poly(ADP-Ribose) Polymerase 1 |
| NLRP3 | NLR Family Pyrin Domain Containing 3 | CTSG | Cathepsin G |
| CASP1 | Caspase 1 | GBP5 | Guanylate Binding Protein 5 |
| CASP4 | Caspase 4 | NLRP7 | NLR Family Pyrin Domain Containing 7 |
| GSDMB | Gasdermin B | MKI67 | Marker Of Proliferation Ki-67 |
| GSDMC | Gasdermin C | IL36G | Interleukin 36 Gamma |
| IL1B | Interleukin 1 Beta | IL36B | Interleukin 36 Beta |
| GZMB | Granzyme B | CPTP | Ceramide-1-Phosphate Transfer Protein |
| NLRP1 | NLR Family Pyrin Domain Containing 1 | BNIP3 | BCL2 Interacting Protein 3 |
| GSDMA | Gasdermin A | ANO6 | Anoctamin 6 |
| GZMA | Granzyme A | MIR103A2 | MicroRNA 103a-2 |
| NLRC4 | NLR Family CARD Domain Containing 4 | MIR103A1 | MicroRNA 103a-1 |
| CASP5 | Caspase 5 | FADD | Fas Associated Via Death Domain |
| AIM2 | Absent In Melanoma 2 | MEFV | MEFV Innate Immuity Regulator, Pyrin |
| PYCARD | PYD And CARD Domain Containing | APOL1 | Apolipoprotein L1 |
| CASP3 | Caspase 3 | TNF | Tumor Necrosis Factor |
| DHX9 | DExH-Box Helicase 9 | VIM | Vimentin |
| NLRP9 | NLR Family Pyrin Domain Containing 9 | CAPN1 | Calpain 1 |
| NAIP | NLR Family Apoptosis Inhibitory Protein | JUN | Jun Proto-Oncogene, AP-1 Transcription Factor Subunit |
| HMGB1 | High Mobility Group Box 1 | XIST | X Inactive Specific Transcript |
| KCNQ1OT1 | KCNQ1 Opposite Strand/Antisense Transcript 1 | MIR139 | MicroRNA 139 |
| CASP8 | Caspase 8 | ALK | ALK Receptor Tyrosine Kinase |
| FOXO3 | Forkhead Box O3 | SIRT1 | Sirtuin 1 |
| MALAT1 | Metastasis Associated Lung Adenocarcinoma Transcript 1 | BIRC3 | Baculoviral IAP Repeat Containing 3 |
| IL18 | Interleukin 18 | BIRC2 | Baculoviral IAP Repeat Containing 2 |
| APIP | APAF1 Interacting Protein | UBE2D2 | Ubiquitin Conjugating Enzyme E2 D2 |
| TXNIP | Thioredoxin Interacting Protein | LY96 | Lymphocyte Antigen 96 |
| GBP1 | Guanylate Binding Protein 1 | RIPK3 | Receptor Interacting Serine/Threonine Kinase 3 |
| MIR214 | MicroRNA 214 | GLMN | Glomulin, FKBP Associated Protein |
| CASP6 | Caspase 6 | IRGM | Immunity Related GTPase M |
| NEK7 | NIMA Related Kinase 7 | NLRP13 | NLR Family Pyrin Domain Containing 13 |
| GJA1 | Gap Junction Protein Alpha 1 | TUBB6 | Tubulin Beta 6 Class V |
| P2RX7 | Purinergic Receptor P2X 7 | NOS2 | Nitric Oxide Synthase 2 |
| MIR30C1 | MicroRNA 30c-1 | NOS1 | Nitric Oxide Synthase 1 |
| MIR22 | MicroRNA 22 | PYDC2 | Pyrin Domain Containing 2 |
| TP53 | Tumor Protein P53 | IFI16 | Interferon Gamma Inducible Protein 16 |
| MALT1 | MALT1 Paracaspase | AKT1 | AKT Serine/Threonine Kinase 1 |
| AGER | Advanced Glycosylation End-Product Specific Receptor | EGFR | Epidermal Growth Factor Receptor |
| TET2 | Tet Methylcytosine Dioxygenase 2 | TP63 | Tumor Protein P63 |
| MIR125A | MicroRNA 125a | ATF6 | Activating Transcription Factor 6 |
| MIR155 | MicroRNA 155 | IRF1 | Interferon Regulatory Factor 1 |
| EEF2K | Eukaryotic Elongation Factor 2 Kinase | IRF2 | Interferon Regulatory Factor 2 |
| PD-L1 | CD274 Molecule | POP1 | POP1 Homolog, Ribonuclease P/MRP Subunit |
| FGF21 | Fibroblast Growth Factor 21 | ORMDL3 | ORMDL Sphingolipid Biosynthesis Regulator 3 |
| KLF3-AS1 | KLF3 Antisense RNA 1 | MDM2 | MDM2 Proto-Oncogene |
| CEBPB | CCAAT Enhancer Binding Protein Beta | BTK | Bruton Tyrosine Kinase |
| TFAM | Transcription Factor A, Mitochondrial | NFKB1 | Nuclear Factor Kappa B Subunit 1 |
| MEG3 | Maternally Expressed 3 | STAT3 | Signal Transducer And Activator Of Transcription 3 |
| MIR21 | MicroRNA 21 | BCL2 | BCL2 Apoptosis Regulator |
| MIR135B | MicroRNA 135b | TLR2 | Toll Like Receptor 2 |
| MIR485 | MicroRNA 485 | ANXA2 | Annexin A2 |
| STK4 | Serine/Threonine Kinase 4 | IL1RN | Interleukin 1 Receptor Antagonist |
| PRDM1 | PR/SET Domain 1 | BECN1 | Beclin 1 |
| PRF1 | Perforin 1 | CD14 | CD14 Molecule |
| MST1 | Macrophage Stimulating 1 | GSTO1 | Glutathione S-Transferase Omega 1 |
| ELAVL1 | ELAV Like RNA Binding Protein 1 | IL13 | Interleukin 13 |
| TREM2 | Triggering Receptor Expressed On Myeloid Cells 2 | CHI3L1 | Chitinase 3 Like 1 |
| CDKN2B-AS1 | CDKN2B Antisense RNA 1 | PANX1 | Pannexin 1 |
| MIR9-1 | MicroRNA 9-1 | LRPPRC | Leucine Rich Pentatricopeptide Repeat Containing |
| MIR9-2 | MicroRNA 9-2 | CXCL8 | C-X-C Motif Chemokine Ligand 8 |
| MIR9-3 | MicroRNA 9-3 | IL13RA2 | Interleukin 13 Receptor Subunit Alpha 2 |
| MIR497 | MicroRNA 497 | IL32 | Interleukin 32 |
| HDAC6 | Histone Deacetylase 6 | BST2 | Bone Marrow Stromal Cell Antigen 2 |
| SQSTM1 | Sequestosome 1 | GPER1 | G Protein-Coupled Estrogen Receptor 1 |
| IRF3 | Interferon Regulatory Factor 3 | LYST | Lysosomal Trafficking Regulator |
| STING1 | Stimulator Of Interferon Response CGAMP Interactor 1 | CLEC5A | C-Type Lectin Domain Containing 5A |
| HNP1 | Hypertensive Nephropathy | GAS5 | Growth Arrest Specific 5 |
| ZBP1 | Z-DNA Binding Protein 1 | MIR223 | MicroRNA 223 |
| PECAM1 | Platelet And Endothelial Cell Adhesion Molecule 1 | MIR15A | MicroRNA 15a |
| DDX3X | DEAD-Box Helicase 3 X-Linked | MIR20B | MicroRNA 20b |
| PRTN3 | Proteinase 3 | NR1H2 | Nuclear Receptor Subfamily 1 Group H Member 2 |
| SERPINB1 | Serpin Family B Member 1 | CAMP | Cathelicidin Antimicrobial Peptide |
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