

SUPPLEMENTARY TABLES

Supplementary Table 1. PANoptosis-related genes.

| PRGs | Source |
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| <i>ADAR</i> | Karki, R., Sundaram, B., Sharma, B.R., et al. (2021). ADAR1 restricts ZBP1-mediated immune response and PANoptosis to promote tumorigenesis. <i>Cell Rep</i> 37(3), 109858. https://doi.org/10.1016/j.celrep.2021.109858 . |
| <i>AIM2</i> | Lee, S., Karki, R., Wang, Y., et al. (2021). AIM2 forms a complex with pyrin and ZBP1 to drive PANoptosis and host defence. <i>Nature</i> 597(7876), 415-419. https://doi.org/10.1038/s41586-021-03875-8 . |
| <i>CASPI</i> | Zheng, M., Karki, R., Vogel, P., et al. (2020). Caspase-6 Is a Key Regulator of Innate Immunity, Inflammasome Activation, and Host Defense. <i>Cell</i> 181(3), 674-687.e613. https://doi.org/10.1016/j.cell.2020.03.040 . |
| <i>CASP4</i> | Christgen, S., Zheng, M., Kesavardhana, S., et al. (2020). Identification of the PANoptosome: A Molecular Platform Triggering Pyroptosis, Apoptosis, and Necroptosis (PANoptosis). <i>Front Cell Infect Microbiol</i> 10, 237. https://doi.org/10.3389/fcimb.2020.00237 . |
| <i>CASP3</i> | Zheng, M., Karki, R., Vogel, P., et al. (2020). Caspase-6 Is a Key Regulator of Innate Immunity, Inflammasome Activation, and Host Defense. <i>Cell</i> 181(3), 674-687.e613. https://doi.org/10.1016/j.cell.2020.03.040 . |
| <i>CASP6</i> | Zheng, M., Karki, R., Vogel, P., et al. (2020). Caspase-6 Is a Key Regulator of Innate Immunity, Inflammasome Activation, and Host Defense. <i>Cell</i> 181(3), 674-687.e613. https://doi.org/10.1016/j.cell.2020.03.040 . |
| <i>CASP8</i> | Malireddi, R.K.S., Kesavardhana, S., and Kanneganti, T.D. (2019). ZBP1 and TAK1: Master Regulators of NLRP3 Inflammasome/Pyroptosis, Apoptosis, and Necroptosis (PAN-optosis). <i>Front Cell Infect Microbiol</i> 9, 406. https://doi.org/10.3389/fcimb.2019.00406 . |
| <i>FADD</i> | Malireddi, R.K.S., Kesavardhana, S., and Kanneganti, T.D. (2019). ZBP1 and TAK1: Master Regulators of NLRP3 Inflammasome/Pyroptosis, Apoptosis, and Necroptosis (PAN-optosis). <i>Front Cell Infect Microbiol</i> 9, 406. https://doi.org/10.3389/fcimb.2019.00406 . |
| <i>GSDMD</i> | Zheng, M., Karki, R., Vogel, P., et al. (2020). Caspase-6 Is a Key Regulator of Innate Immunity, Inflammasome Activation, and Host Defense. <i>Cell</i> 181(3), 674-687.e613. https://doi.org/10.1016/j.cell.2020.03.040 . |
| <i>GSDME</i> | Liu, J., Hong, M., Li, Y., et al. (2022). Programmed Cell Death Tunes Tumor Immunity. <i>Front Immunol</i> 13, 847345. https://doi.org/10.3389/fimmu.2022.847345 . |
| <i>IRF1</i> | Karki, R., Sharma, B.R., Lee, E., et al. (2020). Interferon regulatory factor 1 regulates PANoptosis to prevent colorectal cancer. <i>JCI Insight</i> 5(12). https://doi.org/10.1172/jci.insight.136720 . |
| <i>MAP3K7</i> | Samir, P., Malireddi, R.K.S., and Kanneganti, T.D. (2020). The PANoptosome: A Deadly Protein Complex Driving Pyroptosis, Apoptosis, and Necroptosis (PANoptosis). <i>Front Cell Infect Microbiol</i> 10, 238. https://doi.org/10.3389/fcimb.2020.00238 . |
| <i>MLKL</i> | Zheng, M., Karki, R., Vogel, P., et al. (2020). Caspase-6 Is a Key Regulator of Innate Immunity, Inflammasome Activation, and Host Defense. <i>Cell</i> 181(3), 674-687.e613. https://doi.org/10.1016/j.cell.2020.03.040 . |
| <i>NFS1</i> | Lin, J.F., Hu, P.S., Wang, Y.Y., et al. (2022). Phosphorylated NFS1 weakens oxaliplatin-based chemosensitivity of colorectal cancer by preventing PANoptosis. <i>Signal Transduct Target Ther</i> 7(1), 54. https://doi.org/10.1038/s41392-022-00889-0 . |
| <i>NLRC4</i> | Sundaram, B., and Kanneganti, T.D. (2021). Advances in Understanding Activation and Function of the NLRC4 Inflammasome. <i>Int J Mol Sci</i> 22(3). https://doi.org/10.3390/ijms22031048 . |
| <i>NLRP3</i> | Zheng, M., Karki, R., Vogel, P., et al. (2020). Caspase-6 Is a Key Regulator of Innate Immunity, Inflammasome Activation, and Host Defense. <i>Cell</i> 181(3), 674-687.e613. https://doi.org/10.1016/j.cell.2020.03.040 . |
| <i>PSTPIP2</i> | Samir, P., Malireddi, R.K.S., and Kanneganti, T.D. (2020). The PANoptosome: A Deadly Protein Complex Driving Pyroptosis, Apoptosis, and Necroptosis (PANoptosis). <i>Front Cell Infect Microbiol</i> 10, 238. https://doi.org/10.3389/fcimb.2020.00238 . |

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| PYCARD | Zheng, M., Karki, R., Vogel, P., et al. (2020). Caspase-6 Is a Key Regulator of Innate Immunity, Inflammasome Activation, and Host Defense. <i>Cell</i> 181(3), 674-687.e613. https://doi.org/10.1016/j.cell.2020.03.040 . |
| RBCK1 | Samir, P., Malireddi, R.K.S., and Kanneganti, T.D. (2020). The PANoptosome: A Deadly Protein Complex Driving Pyroptosis, Apoptosis, and Necroptosis (PANoptosis). <i>Front Cell Infect Microbiol</i> 10, 238. https://doi.org/10.3389/fcimb.2020.00238 . |
| RIPK1 | Malireddi, R.K.S., Kesavardhana, S., and Kanneganti, T.D. (2019). ZBP1 and TAK1: Master Regulators of NLRP3 Inflammasome/Pyroptosis, Apoptosis, and Necroptosis (PAN-optosis). <i>Front Cell Infect Microbiol</i> 9, 406. https://doi.org/10.3389/fcimb.2019.00406 . |
| RIPK3 | Malireddi, R.K.S., Kesavardhana, S., and Kanneganti, T.D. (2019). ZBP1 and TAK1: Master Regulators of NLRP3 Inflammasome/Pyroptosis, Apoptosis, and Necroptosis (PAN-optosis). <i>Front Cell Infect Microbiol</i> 9, 406. https://doi.org/10.3389/fcimb.2019.00406 . |
| RNF31 | Samir, P., Malireddi, R.K.S., and Kanneganti, T.D. (2020). The PANoptosome: A Deadly Protein Complex Driving Pyroptosis, Apoptosis, and Necroptosis (PANoptosis). <i>Front Cell Infect Microbiol</i> 10, 238. https://doi.org/10.3389/fcimb.2020.00238 . |
| TNFAIP3 | Samir, P., Malireddi, R.K.S., and Kanneganti, T.D. (2020). The PANoptosome: A Deadly Protein Complex Driving Pyroptosis, Apoptosis, and Necroptosis (PANoptosis). <i>Front Cell Infect Microbiol</i> 10, 238. https://doi.org/10.3389/fcimb.2020.00238 . |
| ZBP1 | Malireddi, R.K.S., Kesavardhana, S., and Kanneganti, T.D. (2019). ZBP1 and TAK1: Master Regulators of NLRP3 Inflammasome/Pyroptosis, Apoptosis, and Necroptosis (PAN-optosis). <i>Front Cell Infect Microbiol</i> 9, 406. https://doi.org/10.3389/fcimb.2019.00406 . |

Supplementary Table 2. Primers and siRNA target sequences.

| Name | Sequences |
|---------------------------|--|
| Primers for real-time PCR | <p>Primer:</p> <p>Forward primer CTCCTTCCCACAAGAGCCAC</p> <p>Reverse primer ACTCACTCCGACTGACCTGT</p> |
| The target sites of siRNA | <p>Si-1:</p> <p>target sequence: atggaaactggccaacattaaaa guide (5'→3')UUAAUGUUGGCCAGUUUCCAU passenger (5'→3')GGAACACUGGCCAACAUUAAAA</p> <p>Si-2:</p> <p>target sequence: cagatttagaaggatgctaaaca guide (5'→3')UUUAGCAUCCUUCUAAUCUG passenger (5'→')GAUUAGGAAGGAUGCUAAACA</p> |