**Supplementary File 1. Studies using *Gzma-/-* mice.**

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| --- | --- | --- | --- |
| **Refs** | **Mice** | **Studies using *Gzma-/-* mice showing a phenotype** | **Year** |
| 1 | *Gzma-/-*  | Gzma is critical for recovery of mice from infection with ectromelia | 1996 |
| 2 | *Gzma-/-*  | Lack of Gzma increases the virulence of cowpox virus | 1999 |
| 3 | *Gzma×b-/-*  | Gzma initiates an alternative pathway for granule-mediated apoptosis | 1999 |
| 4 | *Gzma-/-*  | Increased virus load in spinal ganglia of *Gzma-/-* mice | 2000 |
| 5 | *Gzma-/-* mice, *Gzmb-/-* mice, *Gzma×b-/-*  | Gzma and B and the Gzma substrate, caspase 3, are important for regulating latent HV68 infection | 2004 |
| 6 | *Gzma-/-*, *Gzmb-/-*  | *Gzma-/-* mice resist lipopolysaccharide-induced toxicity | 2008 |
| 7 | *Gzma-/-*  | Gzma as critical effector molecule of human Treg function for gastrointestinal immune response in an experimental GvHD model. | 2015 |
| 8 | *Gzma-/-*  | 1 *Gzma-/-* mice showed a better survival and lower bacterial counts in BALF and distant body sites. 2. Gzma enhances the early inflammatory response in the lung during pneumococcal pneumonia | 2016 |
| 9 | *Gzma-/-* mice, *Gzmb-/-* mice, *Gzma×b-/-*  | Deficiency of Gzma and/or Gzma associated with increased bacterial loads | 2017 |
| 10 | *Gzma-/-*  | NOD Mice lacking Gzma develop increased autoimmune diabetes and increased expression of type I IFN–regulated genes | 2017 |
| 11 | *Gzma-/-* | Gzma contributes to inflammatory arthritis in mice through stimulation of osteoclastogenesis | 2017 |
| 12 | *Gzma-/-*  | Gzma–producing T helper cells are critical for acute graft-versus-host disease | 2020 |
| 13 | *Gzma-/-* | Extracellular Gzma Promotes Colorectal Cancer Development by Enhancing Gut Inflammation | 2020 |
| 14 | *Gzma-/-*, *Gzmb-/-*, *Gzma×b-/-* | Gzma induces a novel death with writhing morphology, 'athetosis' | 2013 |
| 15 | *Gzma-/-*, *Gzmb-/-*, GzmaxB-/- | infection-related pathology, but not bacterial clearance, appears to require Gzma | 2014 |
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| **Studies using *Gzma-/-* ; *Gzmb-/-* double KO mice showing a phenotype** |
| 16 | *Gzma-/-*, *Gzmb-/-*, *Gzma×b-/-* | Lack of Gzma or Gzma renders mice 10 to 100-fold more susceptible to Primary Ect Virus Infection; Gzma and Gzma are effector molecules in granule exocytosis-mediated host defense | 1999 |
| 17 | *Gzma-/-*, *Gzmb-/-*, *Gzma×b-/-*  | Gzma/B contribute to viral elimination in salivary glands | 2000 |
| 18 | *Gzma-/-*, *Gzmb-/-*, *Gzma×b-/-*  | Gzma and Gzma are required for NK cell-mediated tumor control in vivo | 2002 |
| 19 | *Gzma-/-*, *Gzmb-/-*, *Gzma×b-/-*  | Gzma and Gzma partly regulate local inflammation during early pneumonia | 2016 |
| 20 | *Gzma×b-/-*  | Gzma and B are critical for Tc/NK granule–mediated nucleolysis, with Gzma being the main contributor | 1997 |
| 21 | *Gzma×b-/-*  | Virus-induced liver damage only occurs when both the FasL/Fas and the perforin pathways, including Gzma and B, are simultaneously activated | 2001 |
| 22 | *Gzma-/-*, *Gzmb-/-*  *Gzma×b-/-*  | Gzma and Gzma induce rapid perf‐mediated apoptosis | 2002 |
| 23 | *Gzma×b-/-*  | Fas x GzmaxB-/-mice, in contrast to B6, Fas-/-, and GzmaxB-/- mice, do not recover from a primary infection with LCMV | 2004 |
| 24 | *Gzma-/-*, *Gzmb-/-*  | Gzma and Gzma induce multiple independent cell death pathways | 2004 |
| 25 | *Gzma-/-* *Gzmb-/-* , Gzmaxb-/- | Gzma and Gzma are important in controlling replicating virus | 2006 |
| 26 | *Gzma×b-/-*  | Gzma- and B-cluster deficiency delays the acute progression of pneumovirus disease by reducing alveolar injury. | 2010 |
| 27 | *Gzma-/-* *Gzmb-/-*, Gzmaxb-/- | Gzma/B deficiency associated with Th2 cytokine and Ab shift, enhanced early inflammatory gene expression. Gzma deficiency linked with reduced inflammation | 2011 |
| 28 | Gzmaxb-/- | Impaired control of parasite replication and reduced mononuclear cell recruitment in GzmaxB DKO mice in early-stage liver infection by Leishmania | 2015 |
| 29 | Gzmaxb-/- | Failed target cell death and delayed detachment of the killer cell causes significant increase in cytokine release in OTI Gzmab-/- CTLs | 2015 |
| **Studies showing no phenotype** |
| 30 | *Gzma-/-*, *Gzmb-/-*, *Gzma×b-/-* | The course of Leishmania major infection in mice lacking granzyme-mediated mechanisms | 2002 |
| 31 | *Gzma-/-*, *Gzmb-/-*, *Gzma×b-/-* | Gzma and B are not essential for perforin-mediated tumor rejection | 2003 |
| 32 | *Gzma×b-/-* | Concerted action of perforin and granzymes is critical for the elimination of Trypanosoma cruzi from mouse tissues, but prevention of early host death is in addition dependent on the FasL/Fas pathway | 2003 |
| 33 | *Gzma-/-*, *Gzma×b-/-* | Fas-mediated inhibition of CD4+ T cell priming results in dominance of type 1 CD8+ T cells in the immune response to the contact sensitizer trinitrophenyl | 2004 |
| 34 | *Gzma-/-*, *Gzmb-/-*, *Gzma×b-/-* | NK cell-mediated immunopathology during an acute viral infection of the CNS | 2006 |
| 35 | *Gzma-/-*, *Gzma×b-/-* | Gzma-induced cell death exerted by ex vivo CTL: discriminating requirements for cell death and some of its signs.  | 2008 |
| 36 | *Gzma×b-/-* | Rapid and efficient in vivo cytotoxicity by cytotoxic T cells is independent of Gzma and B | 2009 |
| 37 | *Gzma-/-*, *Gzmb-/-* | Characterizing the anti-tumor function of adoptively transferred NK cells in vivo | 2010 |
| 38 | *Gzma-/-*, *Gzmb-/-*, *Gzma×b-/-* | Cathepsin C limits acute viral infection independently of NK cell and CD8+ T-cell cytolytic function | 2011 |
| 39 | *Gzma-/-* | Gzma is dispensable in the development of diabetes in non-obese diabetic mice | 2012 |
| 40 | *Gzma-/-* | Gzma Is Expressed in Mouse Lungs during Mycobacterium tuberculosis Infection but Does Not Contribute to Protection In Vivo | 2016 |

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