

## Cleaved N-terminal GSDMD (PT0680R) PT™ Rabbit mAb

CatalogNo: YM8489 **Recombinant**  **KD/KO Validated** 

### Key Features

#### Host Species

- Rabbit

#### Reactivity

- Human

#### Applications

- WB,IF,ELISA

#### MW

- 53kD (Calculated)
- 35kD (Observed)

#### Isotype

- IgG, Kappa

### Storage

**Storage\*** -15°C to -25°C/1 year (Do not lower than -25°C)

**Formulation** PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA

### Recommended Dilution Ratios

**WB 1:2000-1:10000**

**IF 1:200-1:1000**

**ELISA 1:5000-1:20000**

### Basic Information

**Clonality** Monoclonal

**Clone Number** PT0680R

### Immunogen Information

**Immunogen** The specific immunogen used to produce this antibody is proprietary information.

**Specificity** This antibody detects endogenous levels of Cleaved N-terminal GSDMD.

## Target Information

**Gene name** GSDMD

**Protein Name** Gasdermin domain-containing protein 1,Gasdermin-D,GSDMD,GSDMD-CT,GSDMD-NT,GSDMD\_HUMAN

Organism	Gene ID	UniProt ID
Human		<a href="#">P57764;</a>

### Cellular Localization

[Gasdermin-D]: Cytoplasm , cytosol . Inflammasome . In response to a canonical inflammasome stimulus , such as nigericin , recruited to NLRP3 inflammasome with similar kinetics to that of uncleaved CASP1 precursor. . ; [Gasdermin-D , N-terminal]: Cell membrane ; Multi-pass membrane protein . Secreted . Released in the extracellular milieu following pyroptosis. . ; [Gasdermin-D , C-terminal]: Cytoplasm , cytosol .

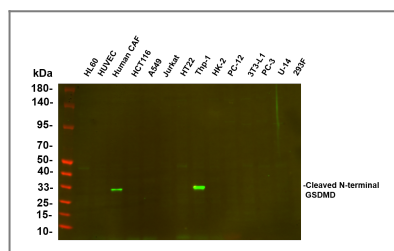
### Tissue specificity

Expressed in the suprabasal cells of esophagus , as well as in the isthmus/neck , pit , and gland of the stomach , suggesting preferential expression in differentiating cells.

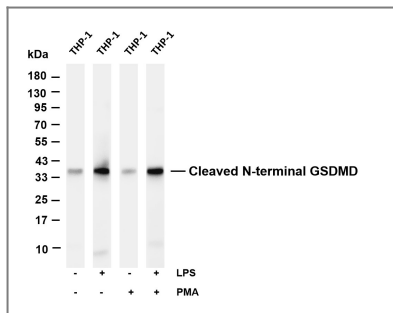
### Function

Cleavage at Asp-275 by CASP1 (mature and uncleaved precursor forms) , CASP4 , CASP5 or CASP8 relieves autoinhibition and is sufficient to initiate pyroptosis (PubMed:26375003 , PubMed:29898893 , PubMed:32109412) . Cleavage by CASP1 and CASP4 is not strictly dependent on the consensus cleavage site on GSDMD but depends on an exosite interface on CASP1 that recognizes and binds the Gasdermin-D , C-terminal (GSDMD-CT) part (PubMed:32109412) . Cleavage by CASP8 takes place following inactivation of MAP3K7/TAK1 by Yersinia toxin YopJ (By similarity) . Cleavage at Asp-87 by CASP3 or CAPS7 inactivates the ability to mediate pyroptosis (PubMed:28392147 , PubMed:28045099) .

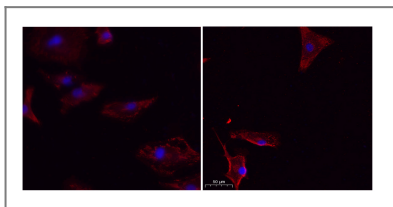
## Validation Data



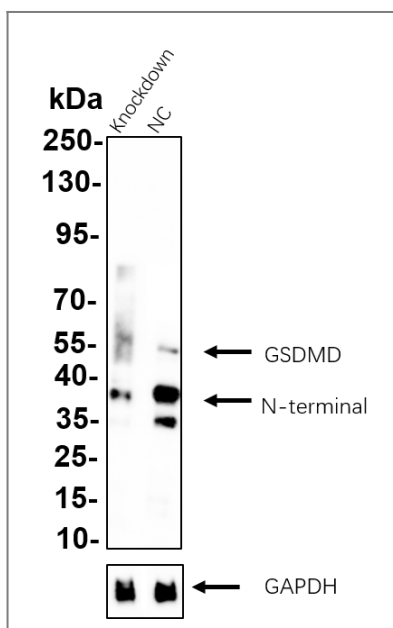
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the primary antibody was used at 4°C over night with a 1:5000 dilution . The Dylight 800-conjugated Goat anti-Rabbit antibody (Cat:RS23920) was used to detect the antibody. Lane1: HL60 - Human promyelocytic leukemia cell Lane2: HUVEC - Human umbilical vein endothelial cell Lane3: Human CAF - Human cancer-associated fibroblast Lane4: HCT116 - Human colorectal carcinoma Lane5: A549 - Human lung carcinoma Lane6: Jurkat - Human T lymphocyte leukemia Lane7: HT22 - Mouse hippocampal neuronal Lane8: Thp-1 - Human monocytic leukemia Lane9: HK-2 - Human proximal tubular epithelial Lane10: PC-12 - Rat adrenal pheochromocytoma Lane11: 3T3-L1 - Mouse embryonic fibroblast Lane12: PC-3 - Human prostate adenocarcinoma Lane13: U-14 - Mouse cervical carcinoma Lane14: 293F - HEK293 derivative, adapted for suspension culture Predicted band size: 35kDa Observed band size: 35kDa



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Cleaved N-terminal GSDMD antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: THP-1 Lane 2: THP-1 was treated with Lipopolysaccharides Lane 3: THP-1 was treated with Phorbol 12-myristate 13-acetate Lane 4: THP-1 was treated with Lipopolysaccharides and Phorbol 12-myristate 13-acetate Predicted band size: 53kDa Observed band size: 35kDa



Immunofluorescence analysis of un-treated (left) A549 and UV treated (right) A549 cell. 1, primary Antibody was diluted at 1:200 (4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min.



Western blot analysis of lysates from THP-1 was treated with Lipopolysaccharides WT and knockdown cell. Cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with Cleaved N-terminal GSDMD (PT0680R) PT Rabbit mAb. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody.

## Contact information

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Please scan the QR code to access additional product information:  
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