

Anti-Gasdermin D (N terminal) Antibody [PSH10-87]

HA723254



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB
Molecular Wt:	Predicted band size: 30 kDa
Clone number:	PSH10-87

Description: Gasdermin D (GSDMD, from combination of gastro and dermato, referencing the locations where its family of proteins were originally found to be primarily expressed is a protein that in humans is encoded by the GSDMD gene on chromosome 8. Several current studies have revealed that GSDMD serves as a specific substrate of inflammatory caspases (caspase-1, -4, -5 and -11) and as an effector molecule for the lytic and highly inflammatory form of programmed cell death known as pyroptosis. Hence, GSDMD is an essential mediator of host defence against microbial infection and danger signals. The pore-forming activity of the N-terminal cleavage product causes cell swelling and lysis to prevent intracellular pathogens from replicating, and is required for the release of cytoplasmic content such as the inflammatory cytokine interleukin-1 β (IL-1 β) into the extracellular space to recruit and activate immune cells to the site of infection. GSDMD has an additional potential role as an antimicrobial by binding to cardiolipin (CL) and form pores on bacterial membranes.

Immunogen: Synthetic peptide within human Gasdermin D aa 226-275.

Positive control: THP-1 treated with 100nM TPA overnight then add 100ng/mL LPS for 7 hours then add 1 μ g/mL BFA for 3 hours cell lysate.

Subcellular location: Cell membrane, Secreted, Mitochondrion membrane, Cytoplasm, cytosol.

Database links: SwissProt: P57764 Human

Recommended Dilutions:

WB 1:2,000

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4 $^{\circ}$ C after thawing. Aliquot store at -20 $^{\circ}$ C. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

华安生物
HUABIO
www.huabio.cn

Images

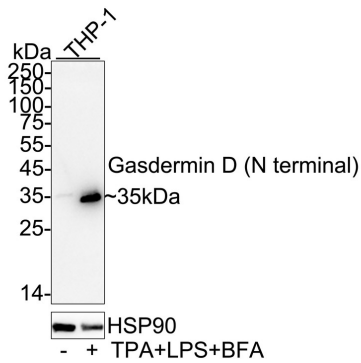


Fig1: Western blot analysis of Gasdermin D (N terminal) on different lysates with Rabbit anti-Gasdermin D (N terminal) antibody (HA723254) at 1/2,000 dilution.

Lane 1: THP-1 cell lysate

Lane 2: THP-1 treated with 100nM TPA overnight then add 100ng/mL LPS for 7 hours then add 1µg/mL BFA for 3 hours cell lysate

Lysates/proteins at 20 µg/Lane.

Predicted band size: 30 kDa

Observed band size: 35 kDa

Exposure time: 2 minutes; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA723254) at 1/2,000 dilution was used in 5% NFDM/TBST at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Wei C et al. Brain endothelial GSDMD activation mediates inflammatory BBB breakdown. *Nature*. 2024 May
2. Li Z et al. The Regulation and Modification of GSDMD Signaling in Diseases. *Front Immunol*. 2022 Jun

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

华安生物
HUABIO
www.huabio.cn