# Anti-DFNA5 / GSDME Antibody [PSH09-51] HA723113

Species reactivity:       Human, Mouse         Applications:       WB, IP         Molecular Wt:       Predicted band size: 55 kDa         Clone number:       PSH09-51         Description:       Non-syndromic hearing impairment protein 5 is a protein that in humans is encoded by the DFNA5 gene. Hearing impairment is a heterogeneous condition with over 40 loci described The protein encoded by this gene is expressed in fetal cochlea, however, its function is no known. Nonsyndromic hearing impairment is associated with a mutation in this gene. The observation that DFNA5 is epigenetically inactivated in a large number of cancers o frequent types (gastric, colorectal, and breast) is another important finding and is in line with its apoptosis-inducing properties. Indeed, if apoptosis is an intrinsic feature of DFNA5 is shutting the gene down in tumor cells makes them more susceptible to uncontrolled cellula growth. Moreover, the fact that DFNA5 is regulated by P53 strongly suggests that DFNA5 is a tumor suppressor gene.         Immunogen:       Recombinant protein within human GSDME aa 1-496.         Subcellular location:       Cytoplasm, cytosol.         Database links:       SwissProt: O60443 Human   Q9Z2D3 Mouse         Recommended Dilutions:       YB         WB       1:2,000         IP       1:2gisample         Storage Buffer:       PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.         Storage Instruction:       Store at +4°C after thawing. Aliquot store at -20°C. Avoid repeated freeze / thaw cycles.		
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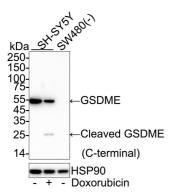
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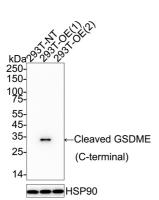
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Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

#### Images





**Fig1:** Western blot analysis of DFNA5 / GSDME on different lysates with Rabbit anti-DFNA5 / GSDME antibody (HA723113) at 1/2,000 dilution.

Lane 1: SH-SY5Y cell lysate Lane 2: SH-SY5Y treated with 4µg/mL Doxorubicin for 24 hours cell lysate Lane 3: SW480 cell lysate (negative)

Lysates/proteins at 20 µg/Lane.

Predicted band size: 55 kDa Observed band size: 55/25 kDa

Exposure time: 3 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 (HA723113) at 1/2,000 dilution was used in 5% NFDM/TBST at  $4^{\circ}$ C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

**Fig2:** Western blot analysis of DFNA5 / GSDME on different lysates with Rabbit anti-DFNA5 / GSDME antibody (HA723113) at 1/2,000 dilution.

Lane 1: 293T transfected with empty control cell lysate Lane 2: 293T transfected with mouse GSDME (C-terminal) cell lysate

Lane 3: 293T transfected with mouse GSDME (N-terminal) cell lysate

Lysates/proteins at 10 µg/Lane.

Exposure time: 51 seconds; 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 (HA723113) at 1/2,000 dilution was used in 5% NFDM/TBST at  $4^{\circ}$ C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

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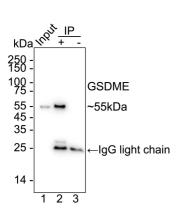
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**Fig3:** DFNA5 / GSDME was immunoprecipitated from 0.2 mg SH-SY5Y treated with 4µg/mL Doxorubicin for 24 hours cell lysate with HA723113 at 2 µg/10 µl beads. Western blot was performed from the immunoprecipitate using HA723113 at 1/1,000 dilution. Mouse Anti-Rabbit IgG kappa light chain secondary antibody (M1208-2) at 1/5,000 dilution was used for 1 hour at room temperature.

Lane 1: SH-SY5Y treated with  $4\mu g/mL$  Doxorubicin for 24 hours cell lysate (input)

Lane 2: HA723113 IP in SH-SY5Y treated with  $4\mu g/mL$  Doxorubicin for 24 hours cell lysate

Lane 3: Rabbit IgG instead of HA723113 in SH-SY5Y treated with  $4\mu\text{g/mL}$  Doxorubicin for 24 hours cell lysate

Blocking/Dilution buffer: 5% NFDM/TBST Exposure time: 10 seconds; ECL: K1801

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

#### **Background References**

- 1. Wei Y et al. GSDME-mediated pyroptosis promotes the progression and associated inflammation of atherosclerosis. Nat Commun. 2023 Feb
- 2. Ai YL et al. Mannose antagonizes GSDME-mediated pyroptosis through AMPK activated by metabolite GlcNAc-6P. Cell Res. 2023 Dec

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