

# Cleaved GSDME (Asp270), C-terminal Recombinant monoclonal antibody

Catalog Number: 88249-1-RR

## Basic Information

**Catalog Number:**

88249-1-RR

**Source:**

Rabbit

**Isotype:**

IgG

**GenBank Accession Number:**

BC019689

**GeneID (NCBI):**

1687

**UNIPROT ID:**

O60443

**Full Name:**

deafness, autosomal dominant 5

**Calculated MW:**

496 aa, 55 kDa

**Observed MW:**

25 kDa

**Purification Method:**

Protein A purification

**CloneNo.:**

253373H3

**Recommended Dilutions:**

WB: 1:500-1:2000

FC (Intra): 0.25 ug per 10<sup>6</sup> cells in a  
100 µl suspension

## Applications

**Tested Applications:**

WB, FC (Intra), ELISA

**Species Specificity:**

human

**Positive Controls:****WB :** Doxorubicin hydrochloride treated A431 cells,  
etoposide treated SH-SY5Y cells**FC (Intra) :** etoposide treated SH-SY5Y cells,

## Background Information

GSDME, also known as DFNA5 (deafness, autosomal dominant 5), is a member of the gasdermin family of pore-forming proteins. In its full-length form, GSDME is autoinhibited. Upon apoptotic stimulation, active caspase-3 specifically cleaves GSDME at a conserved aspartate residue, Asp270 (D270). This cleavage of Gasdermin E separates the N terminal pore forming domain from the C terminal repressor domain. The released N terminal fragment then inserts into the plasma membrane, forms large pores, and induces a lytic, inflammatory form of cell death known as pyroptosis. Therefore, Asp270 cleavage is a critical molecular switch that converts caspase 3 mediated apoptosis into pyroptosis, linking GSDME/DFNA5 to cancer therapy, chemotherapy induced toxicity, and hearing loss pathology.

## Storage

**Storage:**

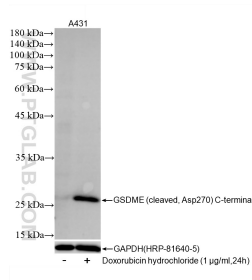
Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

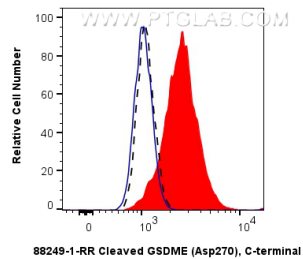
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



Doxorubicin hydrochloride treated A431 cells were subjected to SDS PAGE followed by western blot with 88249-1-RR (Cleaved GSDME (Asp270), C-terminal antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



1X10<sup>6</sup> SH-SY5Y cells untreated (dashed lines) or treated with etoposide which intracellularly stained with 0.25 ug cleaved GSDME (Asp270), C-terminal Recombinant monoclonal antibody (88249-1-RR, Clone:253373H3) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2) (red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with Intracellular Flow Cytometry Fixation & Permeabilization Buffer Kit (PF00019).