

Gasdermin B Antibody



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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP	H	Endogenous	47	Rabbit	#Q8TAX9-1	55876

Product Usage Information

Application

Western Blotting
Immunoprecipitation

Dilution

1:1000
1:100

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Gasdermin B Antibody recognizes endogenous levels of total Gasdermin B protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Leu96 of human Gasdermin B protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

The gasdermin family, which includes GSDMA, GSDMB, GSDMC, GSDMD, and GSDME, has been shown to play a role in inflammation and cell death. Gasdermin D has been reported to have a critical role as a downstream effector of pyroptosis (1,2). Pyroptosis is a lytic type of cell death triggered by inflammasomes, multiprotein complexes assembled in response to pathogen-associated molecular patterns (PAMPs) or danger-associated molecular patterns (DAMPs) that result in the activation of caspase-1 and subsequent cleavage of pro-inflammatory cytokines IL-1β and IL-18 (3). Gasdermin D was identified by two independent groups as a substrate of inflammatory caspases, caspase-1 and caspase-11/4/5, producing two fragments: GSDMD-N and GSDMD-C. Cleavage results in release of an intramolecular inhibitory interaction between the N- and C-terminal domains, allowing the N-terminal fragment GSDMD-N to initiate pyroptosis through the formation of pores on the plasma membrane (4-7).

Gasdermin B (GSDMB) has been reported to be upregulated in several tumor types, and in breast cancer has been associated with metastasis and poor prognosis (8,9). In addition Gasdermin B has been associated with immune disorders including asthma (10,11). Gasdermin B expression has also been found in the lung epithelium associated with asthma. Gasdermin B can also have a role in pyroptosis as it was found to activate caspase-4 and promote Gasdermin D cleavage (12).

Background References

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4. Aglietti, R.A. et al. (2016) *Proc Natl Acad Sci USA* 113, 7858-63.
5. Ding, J. et al. (2016) *Nature* 535, 111-6.
6. Liu, X. et al. (2016) *Nature* 535, 153-8.
7. Sborgi, L. et al. (2016) *EMBO J* 35, 1766-78.
8. Hergueta-Redondo, M. et al. (2014) *PLoS One* 9, e90099.
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10. Yu, J. et al. (2011) *Pediatr Pulmonol* 46, 701-8.
11. Das, S. et al. (2016) *Proc Natl Acad Sci U S A* 113, 13132-7.
12. Chen, Q. et al. (2018) *J Mol Cell Biol*, in press.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: Human

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