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NINJ1 antibody - N-terminal region

Rabbit Polyclonal Antibody
Catalog # AI12678

Product Information

Application	WB
Primary Accession	Q92982
Other Accession	NM_004148, NP_004139
Reactivity	Human, Mouse, Rat, Horse
Predicted	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	16345

Additional Information

Gene ID	4814
Alias Symbol	NIN1, NINJURIN
Other Names	Ninjurin-1, Nerve injury-induced protein 1, NINJ1
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-NINJ1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	NINJ1 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

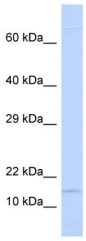
Name	NINJ1 {ECO:0000303|PubMed:33472215, ECO:0000312|HGNC:HGNC:7824}
Function	[Ninjurin-1]: Effector of various programmed cell death, such as pyroptosis and necroptosis, which mediates plasma membrane rupture (cytolysis) (PubMed:33472215, PubMed:36468682, PubMed:37196676, PubMed:37198476, PubMed:38614101, PubMed:39667936). Oligomerizes in response to death stimuli and forms ring-like structures on the plasma membrane: acts by cutting and shedding membrane disks, like a cookie cutter, leading to membrane damage and loss that cannot be repaired by the cell (PubMed:38614101). Plasma membrane rupture leads to release intracellular molecules named damage-associated molecular patterns (DAMPs) that propagate the inflammatory response (PubMed:33472215, PubMed:36468682, PubMed:37196676, PubMed:37198476). Mechanistically,

	mediates plasma membrane rupture by introducing hydrophilic faces of 2 alpha helices into the hydrophobic membrane (PubMed:37198476, PubMed:38614101). Induces plasma membrane rupture downstream of Gasdermin (GSDMA, GSDMB, GSDMC, GSDMD, or GSDME) or MLKL during pyroptosis or necroptosis, respectively (PubMed:33472215, PubMed:36468682, PubMed:37196676, PubMed:37198476). Acts as an effector of PANoptosis downstream of CASP1, CASP4, CASP8 and RIPK3 (By similarity). Also induces plasma membrane rupture in response to cell swelling caused by osmotic stress and ferroptosis downstream of lipid peroxidation (By similarity). Acts as a regulator of Toll-like receptor 4 (TLR4) signaling triggered by lipopolysaccharide (LPS) during systemic inflammation; directly binds LPS (PubMed:26677008). Involved in leukocyte migration during inflammation by promoting transendothelial migration of macrophages via homotypic binding (By similarity). Promotes the migration of monocytes across the brain endothelium to central nervous system inflammatory lesions (PubMed:22162058). Also acts as a homophilic transmembrane adhesion molecule involved in various processes such as axonal growth, cell chemotaxis and angiogenesis (PubMed:33028854, PubMed:8780658, PubMed:9261151). Promotes cell adhesion by mediating homophilic interactions via its extracellular N-terminal adhesion motif (N-NAM) (PubMed:33028854, PubMed:8780658, PubMed:9261151). Involved in the progression of the inflammatory stress by promoting cell-to-cell interactions between immune cells and endothelial cells (PubMed:22162058, PubMed:26677008, PubMed:32147432). Plays a role in nerve regeneration by promoting maturation of Schwann cells (PubMed:8780658, PubMed:9261151). Acts as a regulator of angiogenesis (PubMed:33028854). Promotes the formation of new vessels by mediating the interaction between capillary pericyte cells and endothelial cells (By similarity). Promotes osteoclasts development by enhancing the survival of prefusion osteoclasts (By similarity). Also involved in striated muscle growth and differentiation (By similarity).
Cellular Location	[Ninjurin-1]: Cell membrane; Multi-pass membrane protein. Synaptic cell membrane {ECO:0000250|UniProtKB:O70131}; Multi-pass membrane protein
Tissue Location	Widely expressed in both adult and embryonic tissues, primarily those of epithelial origin

References

Guimaraes,P.E.,(er)SpinalCord(2008)InpressReconstitutionandStorage:Forshorttermuse,storeat2-8Cupto1week.Forlongtermstorage,storeat-20Cinsmallaliquotstopreventfreeze-thawcycles.

Images



WB Suggested Anti-NINJ1 Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:312500
Positive Control: Human Lung

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.