

# NINJ1 / Ninjurin Antibody (C-Terminus)

Rabbit Polyclonal Antibody Catalog # ALS16414

# **Specification**

# NINJ1 / Ninjurin Antibody (C-Terminus) - Product Information

Application IHC, IF Primary Accession 092982

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 16kDa KDa

# NINJ1 / Ninjurin Antibody (C-Terminus) - Additional Information

**Gene ID 4814** 

#### **Other Names**

Ninjurin-1, Nerve injury-induced protein 1, NINJ1

# Target/Specificity

NINJ1 antibody is human, mouse and rat reactive.

#### **Reconstitution & Storage**

Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

#### **Precautions**

NINJ1 / Ninjurin Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

# NINJ1 / Ninjurin Antibody (C-Terminus) - Protein Information

Name NINJ1 {ECO:0000303|PubMed:33472215, ECO:0000312|HGNC:HGNC:7824}

### **Function**

[Ninjurin-1]: Effector of necroptotic and pyroptotic programmed cell death that mediates plasma membrane rupture (cytolysis) (PubMed:<a href="http://www.uniprot.org/citations/33472215" target="\_blank">33472215</a>, PubMed:<a href="http://www.uniprot.org/citations/36468682" target="\_blank">36468682</a>, PubMed:<a href="http://www.uniprot.org/citations/37196676" target="\_blank">37196676</a>, PubMed:<a href="http://www.uniprot.org/citations/37198476" target="\_blank">37198476</a>). Acts downstream of Gasdermin (GSDMA, GSDMB, GSDMC, GSDMD, or GSDME) or MLKL during pyroptosis or necroptosis, respectively: oligomerizes in response to death stimuli and promotes plasma membrane rupture by introducing hydrophilic faces of 2 alpha helices into the hydrophobic membrane, leading to release intracellular molecules named damage- associated molecular patterns (DAMPs) that propagate the inflammatory response (PubMed:<a href="http://www.uniprot.org/citations/33472215" target="\_blank">33472215</a>, PubMed:<a href="http://www.uniprot.org/citations/37196676" target="\_blank">36468682</a>, PubMed:<a href="http://www.uniprot.org/citations/37196676"



target="\_blank">37196676</a>, PubMed:<a href="http://www.uniprot.org/citations/37198476" target="\_blank">37198476</a>). Acts as a regulator of Toll-like receptor 4 (TLR4) signaling triggered by lipopolysaccharide (LPS) during systemic inflammation; directly binds LPS (PubMed:<a href="http://www.uniprot.org/citations/26677008" target="\_blank">26677008</a>). 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:<a href="http://www.uniprot.org/citations/22162058" target="\_blank">22162058</a>). Also acts as a homophilic transmembrane adhesion molecule involved in various processes such as axonal growth, cell chemotaxis and angiogenesis (PubMed:<a

href="http://www.uniprot.org/citations/8780658" target=" blank">8780658</a>, PubMed:<a href="http://www.uniprot.org/citations/9261151" target="blank">9261151</a>, PubMed:<a href="http://www.uniprot.org/citations/33028854" target="blank">33028854</a>). Promotes cell adhesion by mediating homophilic interactions via its extracellular N-terminal adhesion motif (N-NAM) (PubMed:<a href="http://www.uniprot.org/citations/33028854" target=" blank">33028854</a>). Involved in the progression of the inflammatory stress by promoting cell-to-cell interactions between immune cells and endothelial cells (PubMed: <a href="http://www.uniprot.org/citations/22162058" target="\_blank">22162058</a>, PubMed:<a href="http://www.uniprot.org/citations/26677008" target="blank">26677008</a>, PubMed:<a href="http://www.uniprot.org/citations/32147432" target="blank">32147432</a>). Plays a role in nerve regeneration by promoting maturation of Schwann cells (PubMed: <a href="http://www.uniprot.org/citations/8780658" target=" blank">8780658</a>, PubMed:<a href="http://www.uniprot.org/citations/9261151" target="blank">9261151</a>). Acts as a regulator of angiogenesis (PubMed:<a href="http://www.uniprot.org/citations/33028854" target=" blank">33028854</a>). 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

### **Cellular Location**

[Ninjurin-1]: Cell membrane; Multi-pass membrane protein. Synaptic cell membrane {ECO:0000250|UniProtKB:070131}; Multi-pass membrane protein

involved in striated muscle growth and differentiation (By similarity).

# **Tissue Location**

Widely expressed in both adult and embryonic tissues, primarily those of epithelial origin

Volume 50 μl

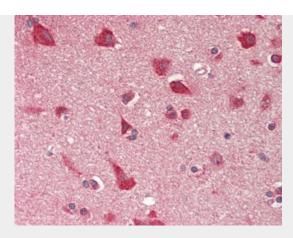
# NINJ1 / Ninjurin Antibody (C-Terminus) - Protocols

Provided below are standard protocols that you may find useful for product applications.

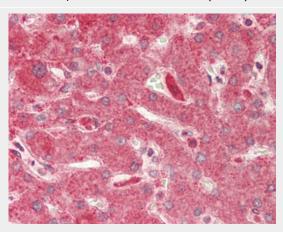
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# NINJ1 / Ninjurin Antibody (C-Terminus) - Images

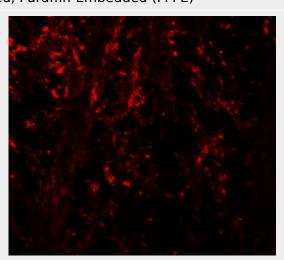




Human Brain, Cortex: Formalin-Fixed, Paraffin-Embedded (FFPE)



Human Liver: Formalin-Fixed, Paraffin-Embedded (FFPE)



Immunofluorescence of NINJ1 in mouse brain tissue with NINJ1 antibody at 20 ug/ml.

NINJ1 / Ninjurin Antibody (C-Terminus) - Background

Homophilic cell adhesion molecule that promotes axonal growth. May play a role in nerve regeneration and in the formation and function of other tissues. Cell adhesion requires divalent cations.

# NINJ1 / Ninjurin Antibody (C-Terminus) - References







Araki T., et al. Neuron 17:353-361(1996). Chadwick B.P., et al. Genomics 47:58-63(1998). Kalnine N., et al. Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases. Humphray S.J., et al. Nature 429:369-374(2004). Mural R.J., et al. Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.