

# Datasheet for ABIN7562505 NINJ1 Protein (AA 1-152) (His tag)



#### Overview

Quantity:	1 mg
Target:	NINJ1
Protein Characteristics:	AA 1-152
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This NINJ1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)
Product Details	

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Purpose:	Custom-made recombinat Ninj1 Protein expressed in mammalien cells.
Sequence:	MESGTEEYEL NGDLRPGSPG SPDALPPRWG LRNRPINVNH YANKKSAAES MLDIALLMAN
	ASQLKAVVEQ GNDFAFFVPL VVLISISLVL QIGVGVLLIF LVKYDLNNPA KHAKLDFLNN
	LATGLVFIIV VVNIFITAFG VQKPVMDVAP RQ Sequence without tag. The proposed
	Purification-Tag is based on experiences with the expression system, a different complexity
	of the protein could make another tag necessary. In case you have a special request, please
	contact us.
Characteristics:	Key Benefits:
	Made to order protein - from design to production - by highly experienced protein experts.
	<ul> <li>Protein expressed in mammalien cells and purified in one-step affinity chromatography</li> </ul>
	<ul> <li>The optimized expression system ensures reliability for intracellular, secreted and</li> </ul>
	transmembrane proteins.

· State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

Grade:

custom-made

## **Target Details**

Target: NINJ1

Alternative Name: Ninj1 (NINJ1 Products)

Background:

Ninjurin-1 (Nerve injury-induced protein 1) [Cleaved into: Secreted ninjurin-1 (Soluble ninjurin-1) (sNinJ1)],FUNCTION: [Ninjurin-1]: Effector of necroptotic and pyroptotic programmed cell death that mediates plasma membrane rupture (cytolysis) (PubMed:19557008, PubMed:33472215, PubMed:36468682, PubMed:37196676, PubMed:37198476). 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:33472215, PubMed:37196676, PubMed:37198476). Acts as a regulator of Toll-like receptor 4 (TLR4) signaling triggered by lipopolysaccharide (LPS) during systemic inflammation, directly binds LPS (PubMed:25860173). Involved in leukocyte migration during inflammation by promoting transendothelial migration of macrophages via homotypic binding (PubMed:24917672). Promotes the migration of monocytes across the brain endothelium to central nervous system inflammatory lesions (By similarity). Also acts as a homophilic transmembrane adhesion molecule involved in various processes such as axonal growth, cell chemotaxis and angiogenesis (PubMed:24347169, PubMed:24917672, PubMed:31526566). Promotes cell

adhesion by mediating homophilic interactions via its extracellular N-terminal adhesion motif (N-NAM) (PubMed:24917672, PubMed:30510259). Involved in the progression of the inflammatory stress by promoting cell-to-cell interactions between immune cells and endothelial cells (PubMed:24917672, PubMed:30510259). Plays a role in nerve regeneration by promoting maturation of Schwann cells (PubMed:31526566). Acts as a regulator of angiogenesis (PubMed:25766274, PubMed:30354207). Promotes the formation of new vessels by mediating the interaction between capillary pericyte cells and endothelial cells (PubMed:25766274, PubMed:30354207). Also mediates vascular functions in penile tissue as well as vascular formation (PubMed:24979788). Promotes osteoclasts development by enhancing the survival of prefusion osteoclasts (PubMed:30700695). Also involved in striated muscle growth and differentiation (PubMed:31091274). Also involved in cell senescence in a p53/TP53 manner, possibly by acting as an indirect regulator of p53/TP53 mRNA translation (PubMed:23690620, PubMed:29073078). {ECO:0000250|UniProtKB:Q92982,

ECO:0000269|PubMed:19557008, ECO:0000269|PubMed:23690620,

ECO:0000269|PubMed:24347169, ECO:0000269|PubMed:24917672,

ECO:0000269|PubMed:24979788, ECO:0000269|PubMed:25766274,

ECO: 0000269 | PubMed: 25860173, ECO: 0000269 | PubMed: 29073078,

ECO: 0000269 | PubMed: 30354207, ECO: 0000269 | PubMed: 30510259, ECO: 0000269 | PubMed: 0000269 | P

ECO:0000269|PubMed:30700695, ECO:0000269|PubMed:31091274,

ECO:0000269|PubMed:31526566, ECO:0000269|PubMed:33472215,

ECO:0000269|PubMed:36468682, ECO:0000269|PubMed:37196676,

ECO:0000269|PubMed:37198476}., FUNCTION: [Secreted ninjurin-1]: Secreted form generated by cleavage, which has chemotactic activity (PubMed:23142597). Acts as an anti-inflammatory mediator by promoting monocyte recruitment, thereby ameliorating atherosclerosis (PubMed:32883094). {ECO:0000269|PubMed:23142597, ECO:0000269|PubMed:32883094}.

Molecular Weight:

16.6 kDa

UniProt:

070131

### **Application Details**

**Application Notes:** 

In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions:

For Research Use only

# Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months