

Datasheet for ABIN3104710

NINJ1 Protein (AA 1-152) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	NINJ1
Protein Characteristics:	AA 1-152
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This NINJ1 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Brand:	ALiCE®
Sequence:	MDSGTEEYEL NGGLPPGTPG SPDASPARWG WRHGPINVNH YASKKSAAES MLDIALLMAN ASQLKAVVEQ GPSFAFYVPL VVLISISLVL QIGVGVLLIF LVKYDLNNPA KHAKLDFLNN LATGLVFIIV VVNIFITAFG VQKPLMDMAP QQ Sequence without tag. The proposed Strep-Tag is based on experience s 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 in Germany - from design to production - by highly experienced protein experts. • Protein expressed with ALiCE® and purified in one-step affinity chromatography • These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).

- 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.

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.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	NINJ1
Alternative Name:	NINJ1 (NINJ1 Products)
Background:	Ninjurin-1 (hNINJ1) (Nerve injury-induced protein 1) [Cleaved into: Secreted ninjurin-1 (Soluble ninjurin-1)],FUNCTION: [Ninjurin-1]: Effector of necroptotic and pyroptotic programmed cell

death that mediates plasma membrane rupture (cytolysis) (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:36468682, 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: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:8780658, PubMed:9261151, PubMed:33028854). Promotes cell adhesion by mediating homophilic interactions via its extracellular N-terminal adhesion motif (N-NAM) (PubMed:33028854). 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 perfusion osteoclasts (By similarity). Also involved in striated muscle growth and differentiation (By similarity).

{ECO:0000250|UniProtKB:O70131, ECO:0000269|PubMed:22162058, ECO:0000269|PubMed:26677008, ECO:0000269|PubMed:32147432, ECO:0000269|PubMed:33028854, ECO:0000269|PubMed:33472215, ECO:0000269|PubMed:36468682, ECO:0000269|PubMed:37196676, ECO:0000269|PubMed:37198476, ECO:0000269|PubMed:8780658, ECO:0000269|PubMed:9261151}, FUNCTION: [Secreted ninjurin-1]: Secreted form generated by cleavage, which has chemotactic activity (By similarity). Acts as an anti-inflammatory mediator by promoting monocyte recruitment, thereby ameliorating atherosclerosis (PubMed:32883094). {ECO:0000250|UniProtKB:O70131, ECO:0000269|PubMed:32883094}.

Molecular Weight: 16.3 kDa

UniProt: [Q92982](#)

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.

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Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.
Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months