

Ninjurin-1 Protein, Rat, Recombinant (hFc)

General Information

Synonyms:	ninjurin 1
Protein Construction:	A DNA sequence encoding the rat NINJ1 (P70617) extracellular domain (Met 1-Pro 79) was fused with the Fc region of human IgG1 at the N-terminus. Predicted N terminal: Glu
Species:	Rat
Expression Host:	HEK293 Cells
Accession:	P70617
Molecular Weight:	37 kDa (predicted); 50 kDa (reducing condition, due to glycosylation)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 95 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/ μ g of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μ m filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Ninjurin-1, also known as NINJ1, is a member of the Ninjurin family of transmembrane (TM) proteins. It is expressed in CD19(+) CD10(+) B-cell progenitor cells and higher levels in B-lineage acute lymphoblastic leukemia cells. Ninjurin-1 is expressed also in some other adult and embryonic tissues, predominantly in epithelial cells. Its expression is upregulated after axotomy in neurons and Schwann cells surrounding the distal nerve segment. Upregulated expression of ninjurin-1 has been identified as a marker of minimal residual disease in B-lineage

acute lymphoblastic leukemia. It mediates homophilic adhesion and promotes neurite extension of dorsal root ganglion neurons in vitro. Ninjurin-1 has been found to show a high expression level in the liver tissue of patients with hepatocellular carcinoma, and this seems to be associated with cases of cirrhosis and chronic viral hepatitis. It has been reported that NINJURIN increases p21 expression and induces cellular senescence in human hepatoma cells.

Reference

- Cardoso CC, et al. (2007) Ninjurin 1 asp110ala single nucleotide polymorphism is associated with protection in leprosy nerve damage. *J Neuroimmunol.* 190 (1-2): 131-8.
- Ifergan I, et al. (2011) Role of Ninjurin-1 in the migration of myeloid cells to central nervous system inflammatory lesions. *Ann Neurol.* 70 (5): 751-63.
- Toyama T, et al. (2005) Ninjurin1 increases p21 expression and induces cellular senescence in human hepatoma cells. *J Hepatol.* 41 (4): 637-43.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481