Technical Data Sheet

Purified Mouse Anti-Ninjurin

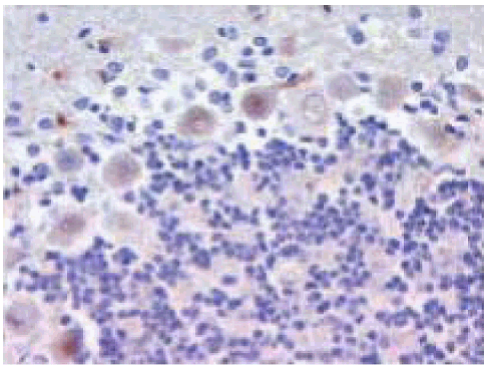
Product Information

Material Number:	**610776**
Size:	50 µg
Concentration:	250 µg/ml
Clone:	50/Ninjurin
Immunogen:	Human Ninjurin aa. 1-152
Isotype:	Mouse IgG2a
Reactivity:	QC Testing: Human Tested in Development: Dog, Rat, Mouse
Target MW:	18-22 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

Ninjurin is a protein whose expression is dramatically increased after sciatic nerve transection and crush injuries. The *Ninjurin* gene encodes for a protein of 152 amino acids with two putative transmembrane domains. Ninjurin was iodinated in vivo and promoted the aggregation of Jurkat cells expressing Ninjurin, indicating a portion of Ninjurin is exposed to the cell surface. The adhesive properties of Ninjurin were energy and temperature dependent, required Ca2+ and Mg2+, and the integrity of the cytoskeleton. Also, the adhesion domain of Ninjurin is located at the extracellular NH2-terminal domain. Although its predicted mass is 16 kDa, Ninjurin migrates as a 18-22 kDa protein in SDS-PAGE, depending on the cell line or tissue. mRNA analysis revealed that Ninjurin is widely expressed with the highest levels in liver, thymus, heart, and the lowest level in brain.

Western blot analysis of Ninjurin on HepG2 lysate. *Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of anti-Ninjurin.*



Immunofluorescent staining on Rat Brain section.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Store undiluted at -20°C.

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	888.259.0187	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country-specific contact information, visit **bdbiosciences.com/how_to_order/**

Application Notes

Application

Western blot	Routinely Tested
Immunofluorescence	Tested During Development
Immunohistochemistry	Tested During Development
Immunoprecipitation	Not Recommended

Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml.

Suggested Companion Products

Catalog Number	Name	Size	Clone
611555	HepG2 Cell Lysate	500 µg	(none)
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Ig	0.5 mg	Polyclonal

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
4. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

References

Araki T, Milbrandt J. Ninjurin, a novel adhesion molecule, is induced by nerve injury and promotes axonal growth. *Neuron.* 1996; 17(2):353-361.(Biology)

Araki T, Zimonjic DB, Popescu NC, Milbrandt J. Mechanism of homophilic binding mediated by ninjurin, a novel widely expressed adhesion molecule. *J Biol Chem.* 1997; 272(34):21373-21380.(Biology)

Chen JS, Coustan-Smith E, Suzuki T. Identification of novel markers for monitoring minimal residual disease in acute lymphoblastic leukemia. *Blood.* 2001; 97(7):2115.(Clone-specific: Flow cytometry)