

Technical Data Sheet

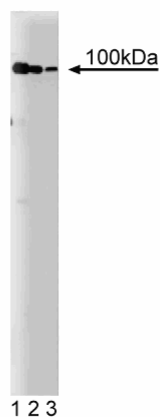
Purified Mouse Anti-NAT1

Product Information

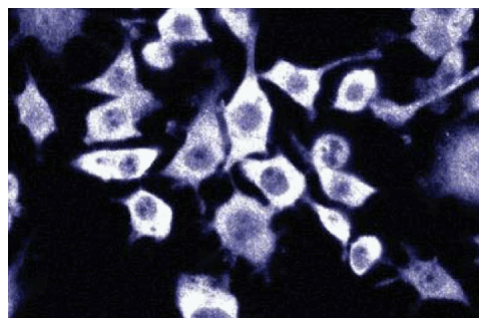
Material Number:	610742
Alternate Name:	Novel APOBEC-1 Target no. 1; DAP-5; Death Associated Protein -5
Size:	50 µg
Concentration:	250 µg/ml
Clone:	35/NAT1
Immunogen:	Human NAT1 aa. 672-830
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Human Tested in Development: Mouse, Rat, Dog, Cow
Target MW:	100 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

eIF-4 proteins are required for recognition of mRNA and acceleration of protein translation. This group of proteins consists of the RNA helicase eIF-4A, the RNA-binding protein eIF-4B, the cap-binding protein eIF-4E, and eIF-4G (p220). NAT1 (Novel APOBEC-1 Target no. 1), also known as DAP-5 (Death Associated Protein -5), is homologous to eIF-4G. Amino acid sequence comparison of NAT1 and eIF-4 shows that NAT1 lacks an eIF-4G N-terminal region. This region mediates eIF-4G association with eIF-4E. The highest degree of homology is within the central portions of NAT1 and eIF-4G, while the lowest degree of homology occurs at the C-terminus. NAT1 more closely resembles a cleaved form of eIF-4G that is involved in cap-independent translation. It is thought that NAT1 is involved in the repression of translation via its inhibition of both cap-dependent and cap-independent translation.



Western blot analysis of NAT1 on a HeLa cell lysate
(Human cervical epitheloid carcinoma; ATCC CCL-2).
Lane 1: 1:500, lane 2: 1:1000, lane 3: 1:2000 dilution of
the mouse anti-NAT1 antibody.



Immunofluorescence staining of mouse
macrophages.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Store undiluted at -20°C.

Application Notes

Application

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

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Recommended Assay Procedure:

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

Suggested Companion Products

<u>Catalog Number</u>	<u>Name</u>	<u>Size</u>	<u>Clone</u>
611449	HeLa 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. 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.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

Henis-Korenblit S, Strumpf NL, Goldstaub D, Kimchi A. A novel form of DAP5 protein accumulates in apoptotic cells as a result of caspase cleavage and internal ribosome entry site-mediated translation. *Mol Cell Biol.* 2000; 20(2):496-506.(Biology: Western blot)

Levy-Strumpf N, Deiss LP, Berissi H, Kimchi A. DAP-5, a novel homolog of eukaryotic translation initiation factor 4G isolated as a putative modulator of gamma interferon-induced programmed cell death. *Mol Cell Biol.* 1997; 17(3):1615-1625.(Biology)

Yamanaka S, Poksay KS, Arnold KS, Innerarity TL. A novel translational repressor mRNA is edited extensively in livers containing tumors caused by the transgene expression of the apoB mRNA-editing enzyme. *Genes Dev.* 1997; 11(3):321-333.(Biology)