

MNSF- β (FL-74): sc-134850

BACKGROUND

The ubiquitin (Ub) pathway involves three sequential enzymatic steps that facilitate the conjugation of Ub and Ub-like molecules to specific protein substrates. The first step requires the ATP-dependent activation of the Ub C-terminus and the assembly of multi-Ub chains by the Ub-activating enzyme known as the E1 component. The Ub chain is then conjugated to the Ub-conjugating enzyme (E2) to generate an intermediate Ub-E2 complex. The Ub-ligase (E3) then catalyzes the transfer of Ub from E2 to the appropriate protein substrate. A wide range of enzymes facilitate in the proteolytic Ub pathway, including monoclonal nonspecific suppressor factor- β (MNSF- β), a subunit of MNSF, which is a lymphokine product of a murine T cell hybridoma that restricts the production of LPS-induced immunoglobulin secreting cells in an antigen-nonspecific manner. MNSF- β is a ubiquitin-like fusion protein consisting of the ribosomal protein S30 and a protein that shares 36% sequence identity with ubiquitin. This ubiquitin-like segment (Ubi-L) can be cleaved from MNSF- β in the cytosol.

REFERENCES

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2. Nakamura, M., Xavier, R.M. and Tanigawa, Y. 1995. Monoclonal nonspecific suppressor factor β inhibits interleukin-4 secretion by a type-2 helper T cell clone. *Eur. J. Immunol.* 25: 2417-2419.
3. Nakamura, M., Xavier, R.M. and Tanigawa, Y. 1996. Ubiquitin-like moiety of the monoclonal nonspecific suppressor factor β is responsible for its activity. *J. Immunology* 156: 532-538.
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CHROMOSOMAL LOCATION

Genetic locus: FAU (human) mapping to 11q13.1; Fau (mouse) mapping to 19 A.

SOURCE

MNSF- β (FL-74) is a rabbit polyclonal antibody raised against amino acids 1-74 representing full length MNSF- β of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

MNSF- β (FL-74) is recommended for detection of MNSF- β and MNSF- β -like protein of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

MNSF- β (FL-74) is also recommended for detection of MNSF- β and MNSF- β -like protein in additional species, including equine, canine, bovine and porcine.

Molecular Weight of MNSF- β : 15 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.