

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human NGF R in direct ELISAs and Western blots. In direct ELISAs, no crossreactivity with recombinant human (rh) 4-1BB, rhCD27, rhCD40, rhBAFF R, rhCD30, rhDR3, rhDR6, rhEDAR, rhFas, rhHVEM, rhGITR, rhLTR B, recombinant mouse (rm) NGF R, rhOPG, rmOX40, rhRANK, rhTAJ, rhTNF RI or rhTNF RII is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 74902
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human NGF R Lys29-Asn250 Accession # P08138
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Flow Cytometry	0.25-1 µg/10 ⁶ cells	SHSY-5Y human cell line

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

NGF R is a type I transmembrane protein that belongs to the tumor necrosis factor receptor family (1) and has been designated TNFRSF16. This receptor is also known as p75 NTR (neurotrophin receptor) because of its ability to bind at low affinity not only to NGF, but also other neurotrophins including Brain-Derived Neurotrophic Factor (BDNF), Neurotrophin-3 and Neurotrophin-4/5. NGF R is a 75 kDa protein that is expressed in neuronal axons, Schwann's cells and perineural cells of peripheral nerves (1). Neural crest stem cells have been isolated based on their surface expression of NGF R (2, 3). In addition, neuroepithelial-derived NGF R positive cells have also been demonstrated to be able to differentiate into neurons, smooth muscle and Schwann cells in culture (4). NGF R has been used as a marker to identify mesenchymal precursors as well as hepatic stellate cells (5, 6).

References:

1. Barker, P.A. et al. (1992) Mol. Cell Biochem. 110:1.
2. Stemple, D.L. et al. (1992) Cell 71:973.
3. Morrison, S.J. et al. (1999) Cell 96:737.
4. Mujtaba, T. et al. (1998) Dev. Biol. 200:1.
5. Campagnolo, L. et al. (2001) Biol. Reprod. 64:464.
6. Cassiman, D. et al. (2001) Hepatology 33:148.

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