Technical Data Sheet

Biotin Mouse Anti-Human CD271

Product Information

 Material Number:
 557195

 Alternate Name:
 NGF Receptor

 Size:
 100 tests

 Vol. per Test:
 20 μl

 Clone:
 C40-1457

 Isotype:
 Mouse IgG1, κ

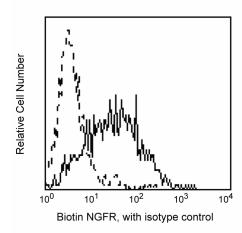
 Reactivity:
 QC Testing: Human

Storage Buffer: Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium

azide.

Description

Reacts with nerve growth factor receptor (NGFR), a 75 kD protein that has been found localized to neuronal axons, Schwann cells, and perineural cells of peripheral nerves. It has also been found in some epithelial, mesenchymal and lymphoid tissues. NGFR is the receptor for nerve growth factor (NGF), a polypeptide that is essential for normal development of the nervous system. NGF promotes survival and differentiation of sympathetic and sensory neurons during embryological development of peripheral neurons. NGF binds to two distinctive surface receptors, the p/140[prototrk] and p75[NGFR]. High affinity binding of NGF requires that both receptor molecules be expressed. NGFR has been found on human and rat lymphocytes. A subset of lymphoid cells in the spleen, lymph nodes, and follicular dentritic cells in germinal centers of reactive lymph nodes were found to express p75. It has been reported that NGFR interaction with its ligand, NGF, may play a role in immunoregulation. NGF may function as a B-cell growth factor.



Profile of REH cell line analyzed by flow cytometry

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody was conjugated with biotin under optimum conditions, and unreacted biotin was removed. Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

Application Notes

A	pplication		
	Flow cytometry	Routinely Tested	

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Suggested Companion Products

Catalog Number	Name	Size	Clone
555747	Biotin Mouse IgG1 κ Isotype Control	100 tests	MOPC-21

Product Notices

- This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 X 10e6 cells in a 100-µl experimental sample (a test).
- 2. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- 3. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- 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.
- 5. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

Brodie C, Gelfand EW. Functional nerve growth factor receptors on human B lymphocytes. Interaction with IL-2. *J Immunol.* 1992; 148(11):3492-3497.(Biology) Chesa PG, Rettig WJ, Thomson TM, Old LJ, Melamed MR. Immunohistochemical analysis of nerve growth factor receptor expression in normal and malignant human tissues. *J Histochem Cytochem.* 1988; 36(4):383-389.(Biology)

Guesdon JL, Ternynck T, Avrameas S. The use of avidin-biotin interaction in immunoenzymatic techniques. *J Histochem Cytochem*. 1979; 27(8):1131-1139. (Biology)

Hempstead BL, Martin-Zanca D, Kaplan DR, Parada LF, Chao MV. High-affinity NGF binding requires coexpression of the trk proto-oncogene and the low-affinity NGF receptor. *Nature*. 1991; 350(6320):678-683.(Biology)

Thompson SJ, Schatteman GC, Gown AM, Bothwell M. A monoclonal antibody against nerve growth factor receptor. Immunohistochemical analysis of normal and neoplastic human tissue. *Am J Clin Pathol.* 1989; 92(4):415-423.(Clone-specific)

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