TECHNICAL DATA SHEET

CyFlow™ CD271 PE

Anti-Hu; Clone NGFR5

REF AM015206

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For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD271
Alternative Names	NGFr(p75), p75(NTR), TNFRSF16, NTR, LNGFR
Clone	NGFR5
Clonality	monoclonal
Format	PE
Host / Isotype	Mouse / IgG1
Species Reactivity	Human, Non-Human Primates | Cat | Ferret | Rabbit
Negative Species Reactivity	Mouse | Rat
Quantity	100 tests
Immunogen	Purified CD271 protein isolated from human melanoma cell line A875

Specificity

The mouse monoclonal antibody NGFR5 (originally C34C) recognizes CD271 antigen, a 75 kDa transmembrane glycoprotein of the TNFR superfamily. The epitope is localized within ammino acids 1 - 160.

Application

The reagent is designed for flow cytometry analysis of human blood cells. Recommended usage is 10 µl reagent / 100 µl of whole blood or 10^6 cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in stabilizing phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.09% (w/v) sodium azide and 0.2% (w/v) BSA.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

CD271 (NGFR, p75NGFR, p75NTR) is a 75 kDa low affinity receptor for the NGF (nerve growth factor), BDNF (brain-derived growth factor), and other neurotrophins, such as NT3 and NT4/5. Unlike other members of the tumor necrosis factor receptor superfamily of transmembrane proteins, CD271 has unique intracellular domain structure (lacks catalytic activity) and downstream signaling partners. Triggered by its ligands CD271 affects growth, differentiation, migration and death of the nervous system cells.

Warnings

Non-Hazardous Statement: This is not considered hazardous by the criteria in 29 CFR 1910.1200 or the General Classification guideline for preparations of the EU.

Safety Data Sheet Statement: Important information regarding the safe handling, transport, and disposal of this product is contained in the Safety Data Sheet (SDS). SDS are available at http://www.sysmex-partec.com/services, or at https://us.sysmex-flowcytometry.com/ (U.S. customers only).

References

• Marano N, Dietzschold B, Earley JJ Jr, Schatteman G, Thompson S, Grob P, Ross AH, Bothwell M, Atkinson BF, Koprowski H: Purification and amino terminal sequencing of human melanoma nerve growth factor receptor. J Neurochem. 1987 Jan; 48(1):225-32. < PMID: 3025363 >

• Schatteman GC, Gibbs L, Lanahan AA, Claude P, Bothwell M: Expression of NGF receptor in the developing and adult primate central nervous system. J Neurosci. 1988 Mar; 8(3):860-73. < PMID: 2831315 >

• 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 Oct; 92(4):415-23. < PMID: 2552791 >

• Alpers CE, Hudkins KL, Ferguson M, Johnson RJ, Schatteman GC, Bothwell M: Nerve growth factor receptor expression in fetal, mature, and diseased human kidneys. Lab Invest. 1993 Dec; 69(6):703-13. < PMID: 7903404 >

Symbols

	Reference number		Contains sufficient for <n> tests
	For research use only		Temperature limit
	Batch code		Keep away from sunlight
	Manufacturer		Consult accompanying documents
	Use-by date		Unique device identifier