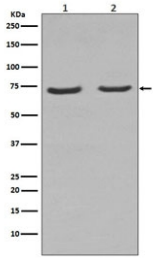
p75NTR Antibody DBO-14 / NGF Receptor Monoclonal Antibody [clone DBO-14] (RQ5203)

Catalog No.	Formulation	Size
RQ5203	Antibody in PBS with 0.02% sodium azide, 50% glycerol and 0.4-0.5mg/ml BSA	100 ul

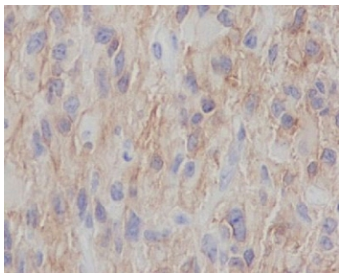
Recombinant RABBIT MONOCLONAL

Bulk quote request

Species Reactivity	Human, Rat
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	DBO-14
Purity	Affinity purified
UniProt	P08138
Applications	Western blot: 1:10000-1:20000 Immunohistochemistry (FFPE): 1:50-1:200
Limitations	This p75NTR Antibody DBO-14 / NGF Receptor Monoclonal Antibody is available for research use only.



p75NTR Antibody DBO-14 by WB in Rat C6 and PC-12 Cell Lysates. Western blot analysis of rat C6 glioma (lane 1) and PC-12 pheochromocytoma (lane 2) cell lysates using rabbit monoclonal p75NTR antibody DBO-14. Both lanes exhibit a strong, distinct immunoreactive band at approximately 70-75 kDa, consistent with the expected electrophoretic migration of glycosylated NGF Receptor (CD271). The observed molecular weight falls within the reported 45-75 kDa range associated with different glycosylation states of p75NTR. The bands demonstrate comparable migration in both rat cell lines, with minimal additional immunoreactivity visible. These results support detection of TNFRSF16 in rat-derived neural cell models.



p75NTR Antibody DBO-14 by IHC in Human Glioma. Immunohistochemistry staining of FFPE human glioma tissue using rabbit monoclonal p75NTR antibody DBO-14. Brown immunoreactivity is observed in scattered tumor cells, with predominantly cytoplasmic and peripheral staining surrounding hematoxylin-counterstained nuclei. Staining intensity varies among individual cells, illustrating heterogeneous NGF Receptor (CD271) expression within the glioma specimen. Heat-induced epitope retrieval was performed by boiling tissue sections in 10 mM citrate buffer, pH 6, for 10-20 minutes, followed by cooling before antibody incubation.

Description

p75NTR Antibody DBO-14 recognizes the p75 neurotrophin receptor, a transmembrane glycoprotein encoded by the NGFR gene. Also known as nerve growth factor receptor, CD271, and TNFRSF16, this protein belongs to the tumor necrosis factor receptor superfamily. It participates in neuronal development, differentiation, survival, and apoptosis through interactions with neurotrophins and associated signaling proteins. Its expression in neural and non-neural tissues makes it an important marker in neuroscience, developmental biology, and cancer research.

The p75 neurotrophin receptor contains four extracellular cysteine-rich domains, a transmembrane region, and an intracellular death domain. Unlike Trk receptors, p75NTR lacks intrinsic tyrosine kinase activity. Instead, it interacts with signaling partners to regulate cellular responses to nerve growth factor (NGF), brain-derived neurotrophic factor (BDNF), and other neurotrophins. Depending on receptor complexes and cellular context, these interactions can promote neuronal survival, differentiation, or programmed cell death.

NGF Receptor signaling involves pathways associated with NF-kappaB, JNK, and RhoA, which influence cellular survival, cytoskeletal organization, and neurite extension. Interactions with Trk receptors can modify neurotrophin sensitivity, while complexes involving sortilin may mediate responses to proneurotrophins. Expression of CD271 is particularly important during peripheral nervous system development and may increase following nerve injury, reflecting its involvement in Schwann cell biology and neuronal regeneration.

Beyond normal neural tissues, p75NTR is expressed in certain neural crest-derived tumors, including melanoma and glioma-associated cell populations. Its expression has been investigated in relation to tumor differentiation, cellular migration, and interactions with the surrounding microenvironment. In glioma research, NGFR signaling may influence tumor cell behavior and responses to extracellular growth factors, although its biological effects depend on cellular context.

Western blotting provides information about NGFR protein expression and electrophoretic migration, while immunohistochemistry helps characterize receptor distribution within tissue sections. The DBO-14 rabbit monoclonal antibody recognizes human and rat p75NTR, supporting investigations involving neural tissues and experimental cell models. A p75NTR Antibody DBO-14 from NSJ Bioreagents is useful for studying NGF Receptor expression, neurotrophin signaling, neuronal differentiation, and neural tumor biology.

For an alternative antibody targeting the same neurotrophin receptor, see our NGFR Antibody NGFR/4919, a mouse monoclonal antibody featuring human melanoma IHC and protein microarray specificity validation.

Application Notes

Optimal dilution of the p75NTR Antibody DBO-14 / NGF Receptor Monoclonal Antibody should be determined by the researcher.

Immunogen

A synthetic peptide specific to human NGF Receptor / p75NTR / CD271 was used as the immunogen for the p75NTR Antibody DBO-14.

Storage

Store the p75NTR Antibody DBO-14 at -20oC.

Alternate Names

NGFR antibody, CD271 antibody, NGF Receptor antibody, Nerve Growth Factor Receptor antibody, Low Affinity NGF Receptor antibody, p75 Neurotrophin Receptor antibody, TNFRSF16 antibody

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