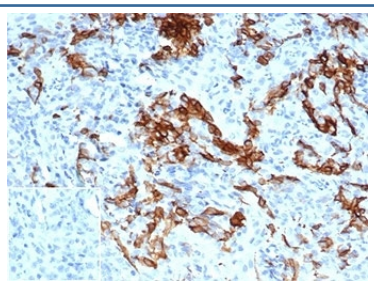
NGFR Antibody NGFR/4919 / p75 Neurotrophin Receptor Antibody [clone NGFR/4919] (V9706)

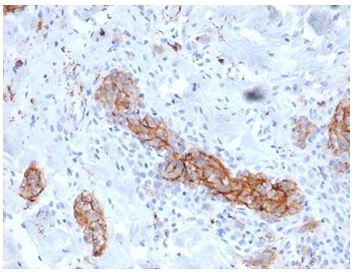
Catalog No.	Formulation	Size
V9706-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9706-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9706SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

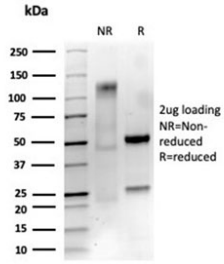
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	NGFR/4919
Purity	Protein A/G affinity
UniProt	P08138
Localization	Cell surface, Cytoplasm
Applications	Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This NGFR Antibody NGFR/4919 / p75 Neurotrophin Receptor Antibody is available for research use only.



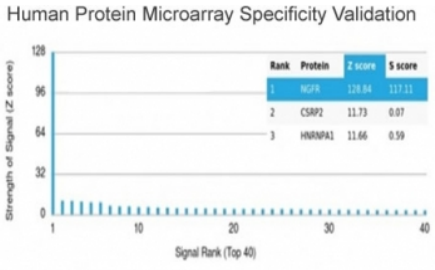
NGFR Antibody NGFR/4919 by IHC in Human Melanoma. Immunohistochemistry staining of FFPE human melanoma tissue using mouse monoclonal NGFR antibody NGFR/4919 at 2 ug/ml. Strong brown immunoreactivity is observed in irregular clusters and branching groups of tumor cells, with predominantly membranous and peripheral cytoplasmic staining. Surrounding tissue exhibits comparatively weak staining, highlighting the distribution of p75 neurotrophin receptor (CD271) expression. The negative control inset shows minimal background staining when PBS replaces the primary antibody. Heat-induced epitope retrieval was performed using 10 mM Tris with 1 mM EDTA, pH 9, for 20 minutes, followed by cooling.



NGFR Antibody NGFR/4919 by IHC Showing Heterogeneous Staining in Human Melanoma. Immunohistochemistry staining of FFPE human melanoma tissue using mouse monoclonal NGFR antibody NGFR/4919 at 2 ug/ml. Prominent brown immunoreactivity is concentrated in discrete groups of tumor cells, with staining outlining cellular boundaries and extending into peripheral cytoplasmic regions. The surrounding tissue demonstrates relatively weak staining, producing a clear contrast between NGFR-positive and less reactive areas. This distribution illustrates heterogeneous expression of p75 neurotrophin receptor (CD271) within melanoma tissue. Heat-induced epitope retrieval was performed using 10 mM Tris with 1 mM EDTA, pH 9, for 20 minutes, followed by cooling.



NGFR Antibody NGFR/4919 by SDS-PAGE Under Reducing and Non-Reducing Conditions. SDS-PAGE analysis of purified, BSA-free mouse monoclonal NGFR antibody NGFR/4919, with 2 ug of antibody loaded per lane. Under non-reducing (NR) conditions, the intact antibody migrates predominantly near 150 kDa. Under reducing (R) conditions, heavy and light chains are observed at approximately 50 kDa and 25 kDa, respectively. These results support the structural integrity of the antibody used to detect p75 neurotrophin receptor, also known as CD271 and TNFRSF16.



NGFR Antibody NGFR/4919 by HuProt Protein Microarray. Protein microarray analysis of mouse monoclonal NGFR antibody NGFR/4919 using a HuProt array containing more than 19,000 full-length human proteins. NGFR produces the dominant binding signal, with substantially lower signals observed for other proteins represented on the array. The Z-score measures signal intensity relative to the overall array distribution, while the S-score reflects separation between the highest-ranking targets. These results provide additional evidence of preferential recognition of NGFR, also known as p75 neurotrophin receptor (CD271), by clone NGFR/4919.

Description

NGFR Antibody NGFR/4919 recognizes nerve growth factor receptor (NGFR), a transmembrane protein belonging to the tumor necrosis factor receptor superfamily. Also known as p75 neurotrophin receptor (p75NTR), CD271, and TNFRSF16, this protein regulates neuronal development, cell survival, differentiation, and responses to neurotrophins. NGFR is expressed in neural crest-derived cells, peripheral nervous system tissues, and selected non-neural cell populations, making it an important marker in neuroscience, developmental biology, and cancer research.

NGFR contains four extracellular cysteine-rich domains, a transmembrane region, and an intracellular death domain. Unlike Trk receptors, p75NTR lacks intrinsic tyrosine kinase activity and relies on interactions with signaling partners. It binds several neurotrophins, including NGF, BDNF, NT-3, and NT-4. Depending on cellular context and receptor interactions, NGFR signaling can promote neuronal survival, differentiation, apoptosis, or changes in cytoskeletal organization.

During nervous system development, p75NTR is expressed by neural crest cells, developing peripheral neurons, and Schwann cell precursors. Its expression can increase following peripheral nerve injury, reflecting its involvement in neuronal repair and regeneration. NGFR also participates in signaling pathways involving NF-kappaB, JNK, and RhoA, which influence cell survival, neurite extension, and cellular migration. CD271 expression is additionally used to identify certain mesenchymal stromal cell populations with distinct differentiation characteristics.

In cancer research, NGFR is particularly relevant to melanoma, including desmoplastic and neurotropic melanoma, where CD271 expression can help characterize neural differentiation. The receptor has also been investigated in neuroblastoma and other neural crest-associated tumors. Its biological effects vary with tumor type, differentiation state, and interactions with the surrounding microenvironment.

Immunohistochemical detection of NGFR helps characterize receptor distribution in normal and malignant tissues. The NGFR/4919 mouse monoclonal antibody supports studies of human tissue expression, while protein microarray testing provides additional evidence of target recognition and specificity. An NGFR Antibody NGFR/4919 from NSJ Bioreagents is useful for investigating p75 neurotrophin receptor expression, melanoma biology, neuronal differentiation, and neurotrophin-associated signaling.

For additional antibodies targeting cell surface markers involved in cellular differentiation, signaling, and immune regulation, explore our CD Antibodies collection.

Application Notes

Optimal dilution of the NGFR Antibody NGFR/4919 / p75 Neurotrophin Receptor Antibody should be determined by the researcher.

Immunogen

WM245 melanoma cells of human origin were used as the immunogen for the NGFR Antibody NGFR/4919.

Storage

Aliquot the NGFR Antibody NGFR/4919 and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

p75NTR antibody, CD271 antibody, TNFRSF16 antibody, NGF Receptor antibody, p75 NGF Receptor antibody, Low Affinity Nerve Growth Factor Receptor antibody, Neurotrophin Receptor p75 antibody

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