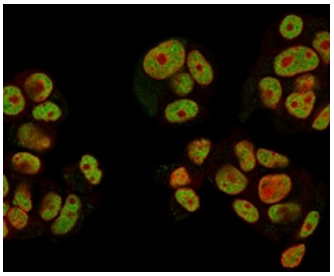
Neuregulin-1 Antibody NRG1/2752 / Heregulin-1 Antibody [clone NRG1/2752] (V7284)

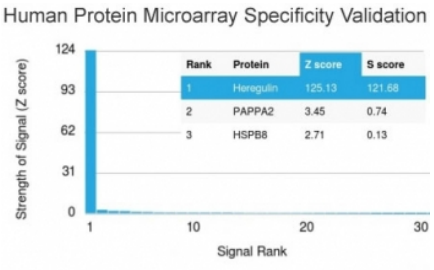
Catalog No.	Formulation	Size
V7284-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7284-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7284SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

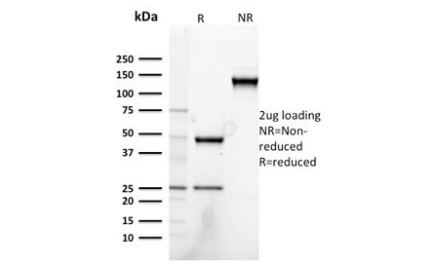
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG
Clone Name	NRG1/2752
Purity	Protein G affinity chromatography
UniProt	Q02297
Localization	Cytoplasmic, plasma membrane, nuclear
Applications	ELISA (order BSA/sodium azide-free format for coating) Immunofluorescence: 1-2ug/ml
Limitations	This Neuregulin-1 Antibody NRG1/2752 / Heregulin-1 Antibody is available for research use only.



Immunofluorescent staining of human MCF7 cells with Neuregulin-1 antibody (clone NRG1/2752, green) and Reddot nuclear stain (red).



Neuregulin-1 Antibody NRG1/2752 Protein Microarray Validation. Protein microarray analysis of clone NRG1/2752 using a HuProt array containing more than 19,000 full-length human proteins. NRG1 produces the top-ranked signal with an S-score of 67.14, showing substantial separation from the next-highest protein and supporting strong target specificity. The Z-score represents signal strength in standard deviations above the array mean, while the S-score represents separation between the intended target and the next-highest signal.



Purified Neuregulin-1 Antibody NRG1/2752 SDS-PAGE. Electrophoretic analysis of 2 ug of purified, BSA-free clone NRG1/2752 under reducing (R) and non-reducing (NR) conditions. The non-reduced sample shows predominantly intact antibody at approximately 150 kDa, while reduction produces the expected immunoglobulin heavy and light chain bands at approximately 50 and 25 kDa, respectively, demonstrating the integrity and purity of the antibody preparation.

Description

Neuregulin-1 Antibody NRG1/2752 / Heregulin-1 Antibody recognizes neuregulin-1, a multifunctional signaling protein encoded by the NRG1 gene. Neuregulin-1 is also historically known as heregulin and belongs to a family of EGF-like signaling molecules involved in cell-cell communication. Extensive alternative promoter usage and alternative splicing generate numerous NRG1 isoforms with differences in structure, tissue distribution and biological activity.

A defining feature shared among NRG1 isoforms is an EGF-like domain that mediates interactions with ErbB receptor tyrosine kinases. NRG1 binds ErbB3 and ErbB4 and can promote formation of signaling receptor complexes involving ErbB2. Activation of these receptors influences pathways controlling cell proliferation, survival, migration and differentiation. The diversity of NRG1 isoforms allows neuregulin signaling to operate through both membrane-associated and processed soluble forms.

Neuregulin-1 signaling has important functions in development and tissue homeostasis. NRG1-ErbB signaling contributes to neural and glial development, Schwann cell biology, cardiac development and epithelial cell regulation. Different NRG1 products have historically been described as heregulins, neu differentiation factor, glial growth factors and acetylcholine receptor-inducing activity, reflecting the diverse biological systems in which the protein was independently characterized.

Clone NRG1/2752 is a mouse monoclonal antibody generated against a portion of amino acids 21-242 of human NRG1. The antibody recognizes human neuregulin-1 and has been evaluated by immunofluorescence and HuProt protein microarray analysis. NSJ Bioreagents provides this Neuregulin-1 Antibody for research into NRG1 expression, ErbB-associated signaling and developmental biology. A Heregulin-1 Antibody can support studies of this growth and differentiation factor and its roles in intercellular signaling.

For additional information on neuregulin biology and broader human, mouse and rat validation, visit our NRG1 Antibody / ErbB Receptor Ligand Antibody page.

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the Neuregulin-1 Antibody NRG1/2752 / Heregulin-1 Antibody to be titered up or down for optimal performance.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

A portion of amino acids 21-242 from the human protein was used as the immunogen for this Neuregulin-1 antibody.

Storage

Store the Neuregulin-1 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

Neuregulin-1 antibody, Heregulin-1 antibody, Heregulin antibody, HRG antibody, Neu differentiation factor antibody, NDF antibody, ARIA antibody

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