

AP13195PU-N**Polyclonal Antibody to Neuregulin 1 (Center) - Purified****Alternate names:**

Acetylcholine receptor-inducing activity, Breast cancer cell differentiation factor p45, GGF, Glial growth factor, HGL, HRG, HRGA, Heregulin, NDF, NRG1, Neu differentiation factor, Pro-neuregulin-1 membrane-bound isoform, SMDF, Sensory and motor neuron-derived factor

Quantity:

0.4 ml

Concentration:

lot specific

Background:

Neuregulin 1 (NRG1) was originally identified as a 44-kD glycoprotein that interacts with the NEU/ERBB2 receptor tyrosine kinase to increase its phosphorylation on tyrosine residues. It is known that an extraordinary variety of different isoforms are produced from the NRG1 gene by alternative splicing. These isoforms include heregulins (HRGs), glial growth factors (GGFs) and sensory and motor neuron-derived factor (SMDF). They are tissue-specifically expressed and differ significantly in their structure. The HRG isoforms all contain immunoglobulin (Ig) and epidermal growth factor-like (EGF-like) domains. GGF and GGF2 isoforms contain a kringle-like sequence plus Ig and EGF-like domains; and the SMDF isoform shares only the EGF-like domain with other isoforms. The receptors for all NRG1 isoforms are the ERBB family of tyrosine kinase transmembrane receptors. Through interaction with ERBB receptors, NRG1 isoforms induce the growth and differentiation of epithelial, neuronal, glial, and other types of cells.

Uniprot ID:[Q02297](#)**NCBI:**[9606](#)**GeneID:**[3084](#)**Host / Isotype:**

Rabbit / Ig

Immunogen:

This antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide selected from the center region of human NRG1.

Format:**State:** Liquid purified Ig**Purification:** Protein G column, eluted with high and low pH buffers and neutralized immediately, followed by dialysis against PBS**Buffer System:** PBS with 0.09% (W/V) sodium azide**Applications:**

ELISA: 1/1,000.

Western Blot: 1/50 - 1/100.

Immunohistochemistry: 1/50 - 1/100.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:

This antibody reacts to NRG1.

Species: Human.

Other species not tested.

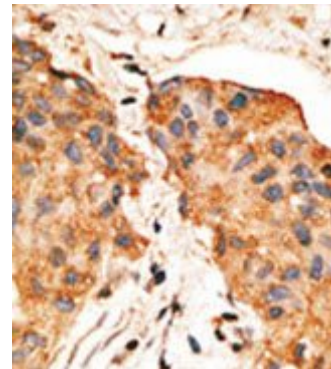
Storage: Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.
 Avoid repeated freezing and thawing.
 Shelf life: one year from despatch.

Caution: This product is for research use only. Not for use in diagnostic or therapeutic procedures.

General Readings:

1. Stove, C., et al., J. Invest. Dermatol. 121(4):802-812 (2003).
2. Adelaide, J., et al., Genes Chromosomes Cancer 37(4):333-345 (2003).
3. Ritch, P.A., et al., J. Biol. Chem. 278(23):20971-20978 (2003).
4. Vermeer, P.D., et al., Nature 422(6929):322-326 (2003).
5. Atlas, E., et al., Mol. Cancer Res. 1(3):165-175 (2003).

Pictures: Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining.



Western blot analysis of anti-NRG1 Antibody (Center) in SK-BR-3 cell line lysates (35ug/lane). NRG1 (arrow) was detected using the purified Pab.

