

## Monoclonal Antibody to Heregulin (NDF/GGF/Neuregulin) - Purified

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

Catalog No.: AM05303PU-N

Quantity: 100 µg

Concentration: Lot specific

Background: HRG/NDF exists in several isoforms, which are classified in two groups alpha and beta.

Uniprot ID: Q02297

Host / Isotype: Mouse / IgG2a

Clone: 7D5

Immunogen: Hybridoma produced by the fusion of splenocytes from BALB/c mice immunized with recombinant extracellular domain of rat NDF protein coupled to KLH and mouse myeloma NSO cells.

Genename: NRG1

Format: State: Liquid purified IgG fraction.

Buffer System: PBS containing 0.08% Sodium Azide as preservative.

Applications: Western Blot (1-5 µg/ml). Immunoprecipitation (2 µg/mg of protein lysate). Immunohistochemistry on Frozen and Formalin/Paraffin Sections (1/20-1/40). Positive Control: HRGa1, HRGb1 recombinant protein or MDA-MB-231 cells; prostate carcinoma. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity: Recognizes a glycoprotein of 44kDa, identified as heregulin (HRG) or neu differentiation factor (NDF) which binds to c-erbB-3 and c-erbB-4 receptors with low and high affinities, respectively. This antibody is directed against the EXTRACELLULAR domain of NDF/HRG and is highly specific. It shows no cross-reaction with EGF and reacts

with both alpha- and beta-isoforms of NDF/HRG, suggesting that its epitope is outside the EGF-domain. This antibody does not inhibit the binding of HRG to ErbB receptors and is excellent for multiple applications.

Species: Human, Rat and Mouse. Others not tested.

Storage: Store the antibody (in aliquots) at -20°C. Avoid repeated freezing and thawing.

Shelf life: One year from despatch.

#### General References:

1. Graus-Porta D; et al. Single-chain antibody-mediated intracellular retention of ErbB-2 impairs Neu differentiation factor and epidermal growth factor signaling. *Molecular and Cellular Biology*, 1995, 15(3):1182-91.
2. Devarajan K, et al. (1996) ErbB-2 is a common auxiliary subunit of NDF- and EGF-receptors: implications for breast cancer. *EMBO. J.* 15 : 254-264.
3. Marte BM; et al. NDF/hereregulin activates MAP kinase and p70/p85 S6 kinase during proliferation or differentiation of mammary epithelial cells. *Oncogene*, 1995, 10(1):167-75.
4. Beerli, R.R., et al. 1995. Neu Differentiation Factor activation of ErbB-3 and ErbB-4 is cell specific and displays a differential requirement for ErbB-2. *Mol. Cell. Biol.*, 15:6496-6505.

#### Pictures:

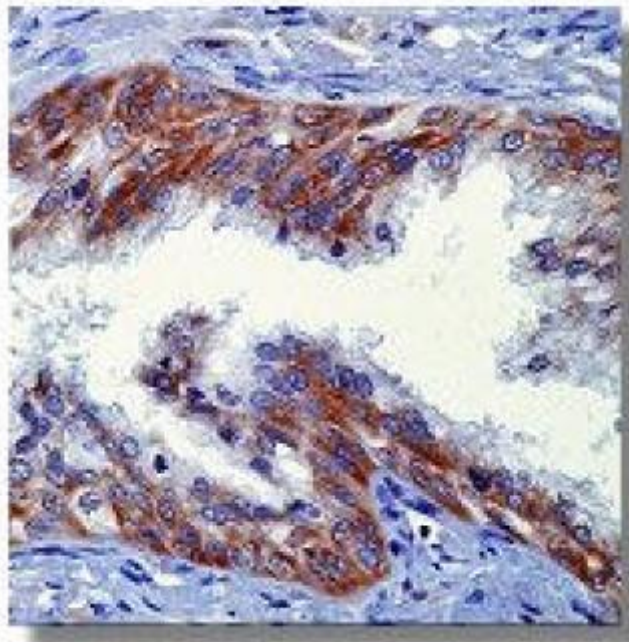


Figure 1. Immunohistochemical staining using HRG antibody (AM05303PU-N) on formalin fixed, paraffin embedded human prostate carcinoma tissue sections.

#### Recommended Isotype Controls:

AM03096PU-N