

## Heregulin/ZNDF/GGF/Neuregulin. Mouse Monoclonal Antibody 7D5 , Human, Rat, Mouse

### BACKGROUND

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

### ORDERING INFORMATION

**CATALOG NUMBER**  
X1370M

**SIZE**  
100  $\mu$ g

**FORM**  
Unconjugated

**HOST/CLONE**  
Mouse Clone 7D5

**FORMULATION**  
Provided as solution in phosphate buffered saline with 0.08% sodium azide

**CONCENTRATION**  
1 mg/ml

**ISOTYPE**  
IgG2a

**APPLICATIONS**  
Western Blot, Immunoprecipitation, Immunohistochemistry (Frozen & Paraffin Sections)

### IMMUNOGEN

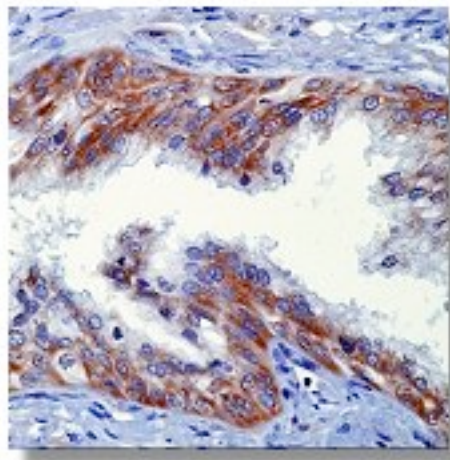
Hybridoma produced by the fusion of splenocytes from BALB/c mice immunized with recombinant extracellular domain of rat NDF protein coupled to KLH and mouse myeloma NSO cells.

### SPECIES REACTIVITY

Human, Rat, Mouse

### Legend:

Immunohistochemical staining using HRG antibody on formalin fixed, paraffin embedded human prostate carcinoma tissue sections.



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**POSITIVE CONTROL/TISSUE EXPRESSION**

HRGa1, HRGb1 recombinant protein or MDA-MB-231 cells; prostate carcinoma

**COMMENTS**

This antibody can be used for Western blotting (1-5 µg/ml), immunoprecipitation (2 µg/mg of protein lysate) and immunohistochemistry on frozen and formalin/paraffin tissue sections (1:20-1:40 dilution). Optimal concentration should be evaluated by serial dilutions.

**SHIP CONDITIONS**

Ship at ambient temperature, freeze upon arrival

**STORAGE CUSTOMER**

Product should be stored at -20°C. Aliquot to avoid freeze/thaw cycles

**STABILITY**

Products are stable for one year from purchase when stored properly

**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/heregulin 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.

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