

## Polyclonal Antibody to Heregulin (NDF, GGF, Neuregulin) - Aff - Purified

**Alternate names:** HGL, HRGA, NRG1, SMDF

**Catalog No.:** SP6353P

**Quantity:** 50 µg

**Concentration:** 0.2 mg/ml

**Background:** Heregulins are a family of ligands that induce phosphorylation of the p185HER-2/neu receptor. Several forms of heregulin (HRG-α, HRG-β-1, HRG-β-2, HRG-β-3, HRG-β-γ) have been described. Heregulin is a 45 kDa growth factor with homology to epidermal growth factor. This growth factor binds directly to HER-3 and HER-4 and activates heterodimeric receptor complexes composed of the type I receptor tyrosine kinases, i.e. HER-1, HER-2, HER-3, and HER-4. HER-3 and HER-4 receptors bind to more than a dozen isoforms of the heregulins. Heregulin-α is a glycoprotein found first in the conditioned medium of breast carcinoma cell line. Investigators have reported a variety of responses of mouse and human breast and ovarian cells to this family of ligands including growth stimulation, growth inhibition, apoptosis and induction of differentiation in cells expressing the HER-2/neu receptor. A number of studies clearly indicate a growth-stimulatory role for this ligand in human breast and ovarian epithelial cells. In some instances, the breast cancer cells themselves produce heregulin.

**Host:** Rabbit

**Immunogen:** Highly antigenic synthetic peptide from the EGF-like domain of human heregulin.

**Format:** **State:** Liquid Ig fraction  
**Purification:** Epitope affinity chromatography  
**Buffer System:** 1x PBS (pH 7.4) containing 0.05% sodium azide

**Applications:** ELISA: 0.1-1.0 µg/ml.  
Western blot: 0.5-2 µg/ml.  
Immunoprecipitation: 3.0-5.0 µg/extract from 10e7 cells.  
Immunohistochemistry: 1/100 at RT for 10 min.  
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

**Specificity:** This antibody is specific for Heregulin alpha. The antibodies were evaluated for specificity with western blot and IHC. By IHC, it has a positive staining in breast cancer or prostate carcinoma or LS174T cells in cytoplasmic and intracellular location. The formalin-fixed tissues are boiled in 10 mM citrate buffer pH 6.0 for 10 minutes followed by cooling at RT for 20 minutes prior to staining.  
**Species:** Human.  
Other species not tested.

**For research and in vitro use only. Not for diagnostic or therapeutic work.**  
Material Safety Datasheets are available at [www.acris-antibodies.com](http://www.acris-antibodies.com) or on request.

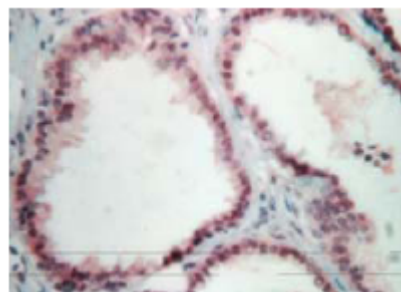
Antibody Hotline - Technical Questions - Antibody Location Service  
Free Call: 0800-2274746 (Germany only) - [www.acris-antibodies.com](http://www.acris-antibodies.com)

**Storage:** Store at 2-8 °C for up to 1 year.

**General Readings:**

1. Guerra-Vladusic, F. et al. Ca. Res. 39, 410(1998).
2. Aguilar, Z. et al. Oncogene 18, 6050 (1999).
3. Guerra-Vladusic, F. et al. Int. J. Oncol. 15, 883(1999).
4. Bagheri-Yarmand, et al. J. Biol. Chem. 275, 39451(2000).
5. Zuleima, Aguilar. J. Biol. Chem. 276, 44099(2001).

**Pictures:** The prostate carcinoma is stained by Rabbit anti-Heregulin antibody at a dilution of 1/100 at RT for 10 min



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