

## ARG56717 anti-NGR1 / Heregulin beta 1 antibody

Package: 50 µg  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes NRG1 / Heregulin beta 1
Tested Reactivity	Hu
Tested Application	ELISA, Neut, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	NRG1 / Heregulin beta 1
Species	Human
Immunogen	E.coli derived Recombinant Human Heregulinβ-1. (SHLVKCAEKE KTFCVNGGEC FMVKDLSNPS RYLCKCPNEF TGDRQCQNYVM ASFYKHLGIE FMEAE)
Conjugation	Un-conjugated
Alternate Names	Sensory and motor neuron-derived factor; Heregulin; GGF2; Glial growth factor; Acetylcholine receptor-inducing activity; SMDF; ARIA; NRG1-IT2; Neu differentiation factor; HRGA; NDF; Breast cancer cell differentiation factor p45; HGL; GGF; MSTP131; Pro-NGR1; HRG; MST131; HRG1; Pro-neuregulin-1, membrane-bound isoform

### Application Instructions

Application table	Application	Dilution
	ELISA	Sandwich: 0.5 - 2.0 µg/ml with ARG56826 as a detection antibody
	Neut	0.7 - 1.1 µg/ml (To yield [ND50] of the biological activity of Human Heregulin - β1 (1.0 ng/ml) )
	WB	0.1 - 0.2 µg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

### Properties

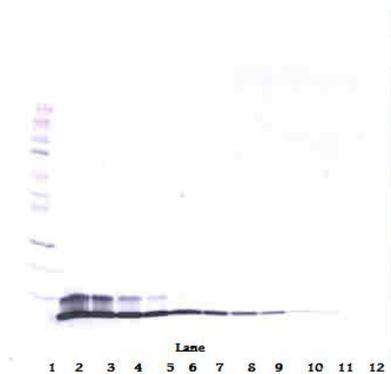
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS (pH 7.2)
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

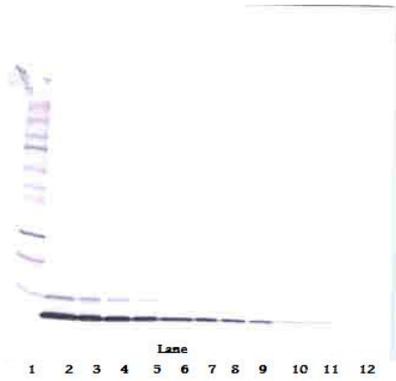
Database links	<a href="#">GeneID: 3084 Human</a> <a href="#">Swiss-port # Q02297 Human</a>
Gene Symbol	NRG1
Gene Full Name	neuregulin 1
Background	The protein encoded by this gene is a membrane glycoprotein that mediates cell-cell signaling and plays a critical role in the growth and development of multiple organ systems. An extraordinary variety of different isoforms are produced from this gene through alternative promoter usage and splicing. These isoforms are expressed in a tissue-specific manner and differ significantly in their structure, and are classified as types I, II, III, IV, V and VI. Dysregulation of this gene has been linked to diseases such as cancer, schizophrenia, and bipolar disorder (BPD). [provided by RefSeq, Jun 2014]
Function	Direct ligand for ERBB3 and ERBB4 tyrosine kinase receptors. Concomitantly recruits ERBB1 and ERBB2 coreceptors, resulting in ligand-stimulated tyrosine phosphorylation and activation of the ERBB receptors. The multiple isoforms perform diverse functions such as inducing growth and differentiation of epithelial, glial, neuronal, and skeletal muscle cells; inducing expression of acetylcholine receptor in synaptic vesicles during the formation of the neuromuscular junction; stimulating lobuloalveolar budding and milk production in the mammary gland and inducing differentiation of mammary tumor cells; stimulating Schwann cell proliferation; implication in the development of the myocardium such as trabeculation of the developing heart. Isoform 10 may play a role in motor and sensory neuron development. [UniProt]
Calculated Mw	70 kDa
PTM	Proteolytic cleavage close to the plasma membrane on the external face leads to the release of the soluble growth factor form. N- and O-glycosylated. Extensive glycosylation precedes the proteolytic cleavage (By similarity).

## Images



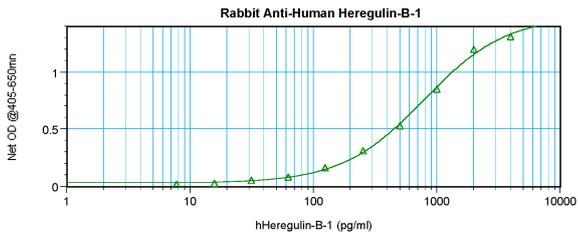
ARG56717 anti-NRG1 / Heregulin beta 1 antibody WB image

Western blot: 250 - 0.24 ng of Human Heregulin- $\beta$ 1 stained with ARG56717 anti-NRG1 / Heregulin beta 1 antibody, under reducing conditions.



ARG56717 anti-NRG1 / Heregulin beta 1 antibody WB image

Western blot: 250 - 0.24 ng of Human Heregulin- $\beta$ 1 stained with ARG56717 anti-NRG1 / Heregulin beta 1 antibody, under non-reducing conditions.



ARG56717 anti-NRG1 / Heregulin beta 1 antibody standard curve image

Sandwich ELISA: ARG56717 anti-NRG1 / Heregulin beta 1 antibody as a capture antibody at 0.5 - 2.0  $\mu$ g/ml combined with ARG56826 anti-Heregulin beta1 antibody (Biotin) as a detection antibody. Results of a typical standard run with optical density.