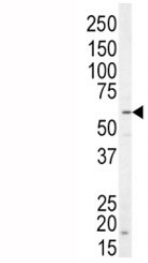
NRG1 Antibody (F49507)

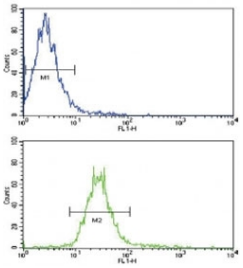
Catalog No.	Formulation	Size
F49507-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F49507-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

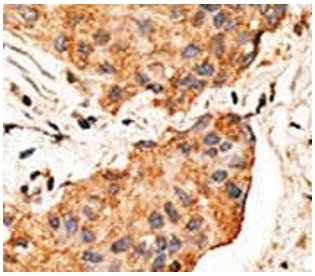
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	Q02297
Localization	Cytoplasmic, membranous, secreted
Applications	Western Blot : 1:1000 Flow Cytometry : 1:10-1:50 IHC (Paraffin) : 1:50-1:100
Limitations	This NRG1 antibody is available for research use only.



Western blot analysis of NRG1 antibody and SK-BR-3 lysate. Predicted molecular weight of multiple isofoms: 26-70 kDa.



Flow cytometric analysis of NCI-H460 cells using NRG1 antibody (green) compared to a negative control (blue). FITC-conjugated goat-anti-rabbit secondary Ab was used for the analysis.



IHC analysis of FFPE human breast carcinoma tissue stained with the NRG1 antibody

Description

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.

Application Notes

Titration of the NRG1 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 198-229 from the human protein was used as the immunogen for this NRG1 antibody. The amino acid sequence used as immunogen is 100% homologous in isoforms Alpha, Alpha1A, Alpha2B, Alpha2 and Alpha3. It is not suitable for detecting the Beta isoforms or the GGF2 isoform.

Storage

Aliquot the NRG1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.