10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

NRG3 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6224b

Product Information

Application	WB, IHC-P, E
Primary Accession	P56975
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	77901
Antigen Region	688-717

Additional Information

Gene ID	10718
Other Names	Pro-neuregulin-3, membrane-bound isoform, Pro-NRG3, Neuregulin-3, NRG-3, NRG3
Target/Specificity	This NRG3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 688-717 amino acids of human NRG3.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	NRG3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NRG3
Function	Direct ligand for the ERBB4 tyrosine kinase receptor. Binding results in ligand-stimulated tyrosine phosphorylation and activation of the receptor. Does not bind to the EGF receptor, ERBB2 or ERBB3 receptors. May be a survival factor for oligodendrocytes.

Cellular Location	[Pro-neuregulin-3, membrane-bound isoform]: Cell membrane; Single-pass type I membrane protein. Note=Does not seem to be active. [Isoform 3]: Cell membrane; Single-pass type I membrane protein. Note=Isoform 3 is also proteolytically released as a soluble form
Tissue Location	Highly expressed in most regions of the brain with the exception of corpus callosum. Expressed at lower level in testis Not detected in heart, placenta, lung, liver, skeletal muscle, kidney, pancreas, spleen, thymus, prostate, ovary, small intestine, colon and peripheral blood leukocytes

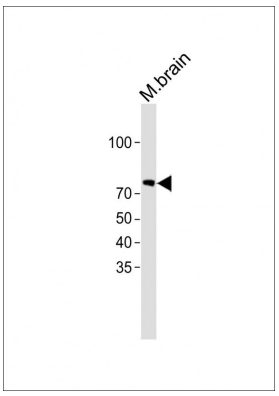
Background

NRG3, which belongs to the neuregulin family, is a direct ligand for the ERBB4 tyrosine kinase receptor. Binding results in ligand-stimulated tyrosine phosphorylation and activation of the receptor. NRG3 does not bind to the EGF receptor, ERBB2 or ERBB3 receptors. The protein exists as an type I membrane protein and as a proteolytically released soluble growth factor form. The membrane-bound form does not appear to be active. NRG3 is highly expressed in most regions of the brain with the exception of corpus callosum, and is expressed at lower level in testis. It is not detected in heart, placenta, lung, liver, skeletal muscle, kidney, pancreas, spleen, thymus, prostate, ovary, small intestine, colon and peripheral blood leukocytes. The NRG3 cytoplasmic domain may be involved in the regulation of trafficking and proteolytic processing. Regulation of the proteolytic processing may involve initial intracellular domain dimerization.

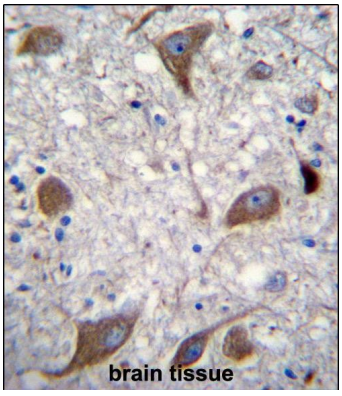
References

Zhang, D., et al., Proc. Natl. Acad. Sci. U.S.A. 94(18):9562-9567 (1997).
Gizatullin, R.Z., et al., Chromosome Res. 8 (6), 560 (2000) (): ().

Images



All lanes: Anti-NRG3 Antibody (C-term) at 1:1000 dilution + Mouse brain lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 78 KDa Blocking/Dilution buffer: 5% NFDM/TBST.



NRG3 Antibody (C-term) (Cat. #AP6224b)immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of NRG3 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Citations

- Dynamic expression of Erbb pathway members during early mammary gland morphogenesis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.