

# NRG3 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP6224b

## Product Information

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<b>Application</b>	WB, IHC-P, E
<b>Primary Accession</b>	<a href="#">P56975</a>
<b>Reactivity</b>	Human
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Calculated MW</b>	77901
<b>Antigen Region</b>	688-717

## Additional Information

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<b>Gene ID</b>	10718
<b>Other Names</b>	Pro-neuregulin-3, membrane-bound isoform, Pro-NRG3, Neuregulin-3, NRG-3, NRG3
<b>Target/Specificity</b>	This NRG3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 688-717 amino acids of human NRG3.
<b>Dilution</b>	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
<b>Format</b>	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.
<b>Storage</b>	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.
<b>Precautions</b>	NRG3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	NRG3
<b>Function</b>	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.
<b>Cellular Location</b>	[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

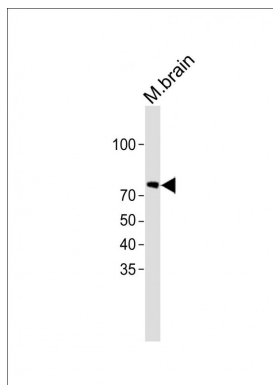
## Background

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.

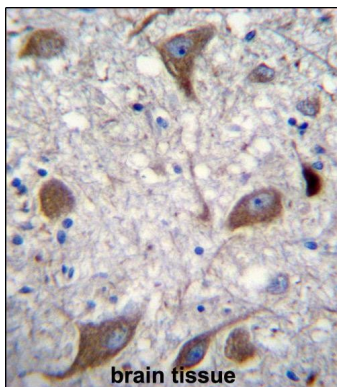
## References

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'.