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NRG3 Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP6224a

Specification

NRG3 Antibody (Center) Blocking Peptide - Product Information

Primary Accession P56975

NRG3 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 10718

Other Names
Pro-neuregulin-3, membrane-bound isoform, Pro-NRG3, Neuregulin-3, NRG-3, NRG3

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP6224a was selected from the Center region of human NRG3 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

NRG3 Antibody (Center) Blocking Peptide - Protein Information

Name NRG3

NRG3 Antibody (Center) Blocking Peptide - 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.

NRG3 Antibody (Center) Blocking Peptide - References

Zhang, D., et al., Proc. Natl. Acad. Sci. U.S.A. 94(18):9562-9567 (1997).

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

NRG3 Antibody (Center) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides