

**Goat Anti-Neuregulin 3 Antibody**  
Peptide-affinity purified goat antibody  
Catalog # AF1719a

**Specification**

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**Goat Anti-Neuregulin 3 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P56975</a>
Other Accession	<a href="#">NP_001010848</a> , <a href="#">10718</a> , <a href="#">18183 (mouse)</a>
Reactivity	Human, Mouse, Rat
Predicted	Dog
Host	Goat
Clonality	Polyclonal
Concentration	0.5mg/ml
Isotype	IgG
Calculated MW	77901

**Goat Anti-Neuregulin 3 Antibody - Additional Information**

**Gene ID** 10718

**Other Names**

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

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-Neuregulin 3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-Neuregulin 3 Antibody - 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

#### Goat Anti-Neuregulin 3 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### Goat Anti-Neuregulin 3 Antibody - Images



AF1719a (0.3 µg/ml) staining of Human Brain (Cerebellum) lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

#### Goat Anti-Neuregulin 3 Antibody - Background

This gene is a member of the neuregulin gene family. This gene family encodes ligands for the transmembrane tyrosine kinase receptors ERBB3 and ERBB4 - members of the epidermal growth factor receptor family. Ligand binding activates intracellular signaling cascades and the induction of cellular responses including proliferation, migration, differentiation, and survival or apoptosis. This gene encodes neuregulin 3 (NRG3). NRG3 has been shown to activate the tyrosine phosphorylation of its cognate receptor, ERBB4, and is thought to influence neuroblast proliferation, migration and differentiation by signalling through ERBB4. NRG3 also promotes mammary differentiation during embryogenesis. Linkage studies have implicated this gene as a susceptibility locus for schizophrenia and schizoaffective disorder. Alternative splicing results in multiple transcript variants encoding distinct isoforms. Additional transcript variants have been described but their biological validity has not been verified.

#### Goat Anti-Neuregulin 3 Antibody - References

Common genetic variation in Neuregulin 3 (NRG3) influences risk for schizophrenia and impacts NRG3 expression in human brain. Kao WT, et al. Proc Natl Acad Sci U S A, 2010 Aug 31. PMID 20713722. Variation at the NFATC2 Locus Increases the Risk of Thiazolinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086. Neuregulin 3 (NRG3) as a susceptibility gene in a schizophrenia subtype with florid delusions and relatively spared cognition. Morar B, et al. Mol Psychiatry, 2010 Jun 15. PMID 20548296. Comprehensive copy number variant (CNV) analysis of neuronal pathways genes in psychiatric disorders identifies rare variants within patients. Saus E, et al. J Psychiatr Res, 2010 Apr 14. PMID 20398908. Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.