

Neuregulin-3 Polyclonal Antibody

Catalog No: YT5648

Reactivity: Human; Mouse

Applications: WB;IHC;IF;ELISA

Target: Neuregulin-3

Fields: >>ErbB signaling pathway;>>Amyotrophic lateral sclerosis

Gene Name: NRG3

Protein Name: Pro-neuregulin-3 membrane-bound isoform

P56975

O35181

Human Gene Id: 10718

Human Swiss Prot

Human Swiss Fib

No:

Mouse Gene Id: 18183

Mouse Swiss Prot

No:

Immunogen: The antiserum was produced against synthesized peptide derived from the

Internal region of human NRG3. AA range:311-360

Specificity: Neuregulin-3 Polyclonal Antibody detects endogenous levels of Neuregulin-3

protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution : WB 1:500 - 1:2000. IHC: 1:100-1:300. ELISA: 1:10000.. IF 1:50-200

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

1/4



Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 80kD

Cell Pathway: ErbB_HER;

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 transcri

Function:

developmental stage:Isoform 3 is expressed in fetal brain but not in other fetal tissues.,domain:ERBB receptor binding is elicited entirely by the EGF-like domain.,domain:The cytoplasmic domain may be involved in the regulation of trafficking and proteolytic processing. Regulation of the proteolytic processing involves initial intracellular domain dimerization.,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.,PTM:Extensive glycosylation precedes the proteolytic cleavage (By similarity). Isoform 3 is glycosylated.,PTM:Proteolytic cleavage close to the plasma membrane on the external face leads to the release of the soluble growth factor form.,similarity:Belongs to the neuregul

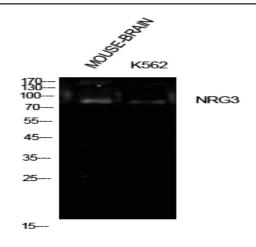
Subcellular Location :

[Pro-neuregulin-3, membrane-bound isoform]: Cell membrane; Single-pass type I membrane protein. Does not seem to be active. .; [Neuregulin-3]: Secreted .; [Isoform 3]: Cell membrane; Single-pass type I membrane protein. Isoform 3 is also proteolytically released as a soluble form.

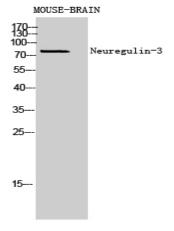
Expression:

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.

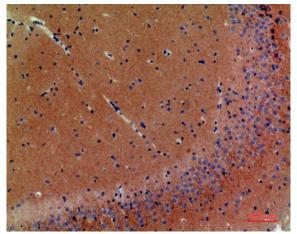
Products Images



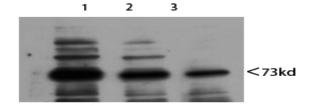
Western Blot analysis of mouse brain, K562 cells using Neuregulin-3 Polyclonal Antibody. Antibody was diluted at 1:1000. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Western Blot analysis of MOUSE-BRAIN cells using Neuregulin-3 Polyclonal Antibody diluted at 1:1000. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded mousebrain, antibody was diluted at 1:200 Western Blot analysis of mouse-heart mouse-brain mouse-lung using Neuregulin-3 Polyclonal Antibody diluted at 1:800. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



1 mouse-heart 2 mouse-brain 3mouse-lung