



Neuregulin-3 Monoclonal Antibody

Catalog No	YP-mAb-16062
Isotype	IgG
Reactivity	Human;Mouse
Applications	WB
Gene Name	NRG3
Protein Name	Pro-neuregulin-3 membrane-bound isoform
Immunogen	The antiserum was produced against synthesized peptide derived from the Internal region of human NRG3. AA range:311-360
Specificity	Neuregulin-3 Monoclonal Antibody detects endogenous levels of Neuregulin-3 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	NRG3; Pro-neuregulin-3, membrane-bound isoform; Pro-NRG3
Observed Band	80kD
Cell Pathway	[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.
Tissue Specificity	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.
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

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

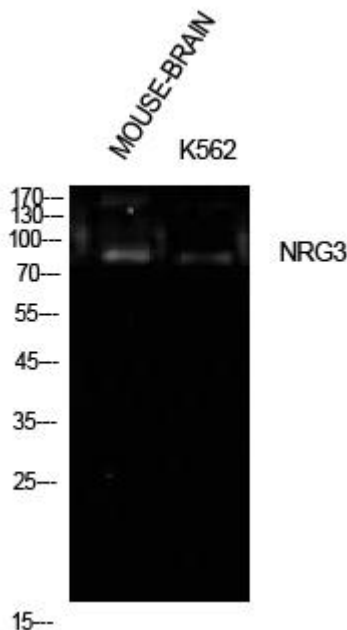
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using
Neuregulin-3 Monoclonal Antibody