ARG62512
anti-NRG1 / Heregulin beta 1 antibody [7D5]

Package: 100 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [7D5] recognizes NRG1 / Heregulin beta 1
Tested Reactivity	Hu, Ms, Rat
Tested Application	IHC-Fr, IHC-P, IP, WB
Specificity	This antibody reacts with a 44 kD protein known as NRG1 (Neuregulin 1)/ Heregulin/Neu Differentiation Factor/NDF.
Host	Mouse
Clonality	Monoclonal
Clone	7D5
Isotype	IgG2a
Target Name	NRG1 / Heregulin beta 1
Species	Rat
Immunogen	Recombinant extracellular domain of rat NDF protein
Conjugation	Un-conjugated
Alternate Names	Sensory and motor neuron-derived factor; Heregulin; GGF2; Glial growth factor; Acetylcholine receptor-inducing activity; SMDF; ARIA; NRG1-IT2; Neu differentiation factor; HRGA; NDF; Breast cancer cell differentiation factor p45; HGL; GGF; MSTP131; Pro-NRG1; HRG; MST131; HRG1; Pro-neuregulin-1, membrane-bound isoform

Application Instructions

Application Note	WB: 1-5 µg/ml IP: 2 µl/mg of lysate IHC: 1/10-1/500 * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form	Liquid
Buffer	PBS (pH 7.4) and 0.08% Sodium azide
Preservative	0.08% Sodium azide
Concentration	0.2 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 112400 Rat GeneID: 3084 Human Swiss-port # P43322 Rat Swiss-port # Q02297 Human
Gene Symbol	Nrg1
Gene Full Name	neuregulin 1
Background	The protein encoded by this gene is a membrane glycoprotein that that mediates cell-cell signaling and plays a critical role in the growth and development of multiple organ systems. An extraordinary variety of different isoforms are produced from this gene through alternative promoter usage and splicing. These isoforms are expressed in a tissue-specific manner and differ significantly in their structure, and are classified as types I, II, III, IV, V and VI. Dysregulation of this gene has been linked to diseases such as cancer, schizophrenia, and bipolar disorder (BPD). [provided by RefSeq, Jun 2014]
Function	Direct ligand for ERBB3 and ERBB4 tyrosine kinase receptors. Concomitantly recruits ERBB1 and ERBB2 coreceptors, resulting in ligand-stimulated tyrosine phosphorylation and activation of the ERBB receptors. The multiple isoforms perform diverse functions such as inducing growth and differentiation of epithelial, glial, neuronal, and skeletal muscle cells; inducing expression of acetylcholine receptor in synaptic vessicles during the formation of the neuromuscular junction; stimulating lobuloalveolar budding and milk production in the mammary gland and inducing differentiation of mammary tumor cells; stimulating Schwann cell proliferation; implication in the development of the myocardium such as trabeculation of the developing heart (By similarity). [UniProt]
Research Area	Neuroscience antibody
Calculated Mw	70 kDa
PTM	Proteolytic cleavage close to the plasma membrane on the external face leads to the release of the soluble growth factor form. N- and O-glycosylated. Extensive glycosylation precedes the proteolytic cleavage (By similarity).
Cellular Localization	Secreted; Cell membrane