

Datasheet for ABIN7164301

anti-Neuregulin 1 antibody (AA 75-176)**2** Images[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	Neuregulin 1 (NRG1)
Binding Specificity:	AA 75-176
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Neuregulin 1 antibody is un-conjugated
Application:	Immunohistochemistry (IHC), ELISA, Immunofluorescence (IF)

Product Details

Immunogen:	Recombinant Human Pro-neuregulin-1, membrane-bound isoform protein (75-176AA)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	>95%, Protein G purified

Target Details

Target:	Neuregulin 1 (NRG1)
Alternative Name:	NRG1 (NRG1 Products)
Background:	Background: Direct ligand for ERBB3 and ERBB4 tyrosine kinase receptors. Concomitantly recruits ERBB1 and ERBB2 coreceptors, resulting in ligand-stimulated tyrosine phosphorylation

Target Details

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 vesicles 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. Isoform 10 may play a role in motor and sensory neuron development. Binds to ERBB4 (PubMed:10867024, PubMed:7902537). Binds to ERBB3 (PubMed:20682778). Acts as a ligand for integrins and binds (via EGF domain) to integrins ITGAV:ITGB3 or ITGA6:ITGB4. Its binding to integrins and subsequent ternary complex formation with integrins and ERBB3 are essential for NRG1-ERBB signaling. Induces the phosphorylation and activation of MAPK3/ERK1, MAPK1/ERK2 and AKT1 (PubMed:20682778). Ligand-dependent ERBB4 endocytosis is essential for the NRG1-mediated activation of these kinases in neurons (By similarity).

Aliases: Acetylcholine receptor-inducing activity antibody, Acetylcholine receptor-inducing activity, chick, homolog of antibody, ARIA antibody, Breast cancer cell differentiation factor p45 antibody, GGF antibody, GGF2 antibody, glial growth factor 2 antibody, Glial growth factor antibody, Heregulin antibody, heregulin, alpha (45kD, ERBB2 p185-activator) antibody, heregulin, alpha antibody, HGL antibody, HRG antibody, HRG1 antibody, HRGA antibody, MST131 antibody, MSTP131 antibody, NDF antibody, Neu differentiation factor antibody, Neuregulin-1 antibody, nrg1 antibody, NRG1-IT2 antibody, NRG1_HUMAN antibody, Pro-NRG1 antibody, Sensory and motor neuron-derived factor antibody, SMDF antibody

UniProt: [Q02297](#)

Pathways: [RTK Signaling](#), [Fc-epsilon Receptor Signaling Pathway](#), [EGFR Signaling Pathway](#), [Neurotrophin Signaling Pathway](#), [Regulation of Muscle Cell Differentiation](#)

Application Details

Application Notes: Recommended dilution: IHC:1:20-1:200, IF:1:50-1:200,

Restrictions: For Research Use only

Handling

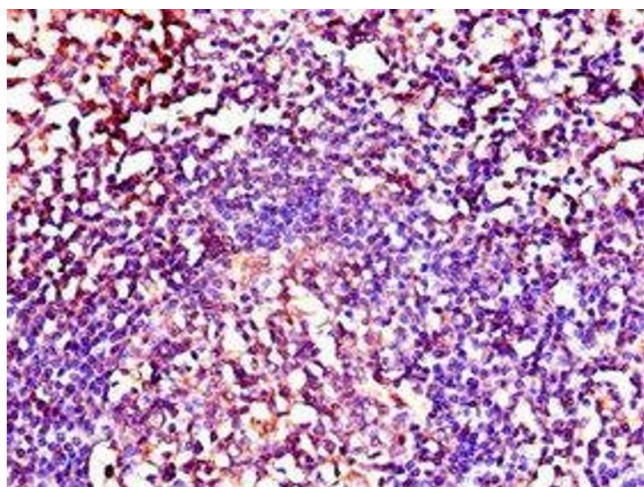
Format: Liquid

Buffer: Preservative: 0.03 % Proclin 300

Handling

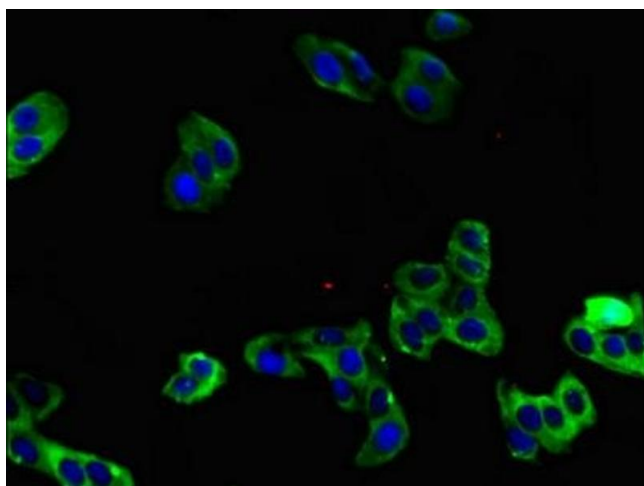
	Constituents: 50 % Glycerol, 0.01M PBS, PH 7.4
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



Immunohistochemistry

Image 1. Immunohistochemistry of paraffin-embedded human tonsil tissue using ABIN7164301 at dilution of 1:100



Immunofluorescence

Image 2. Immunofluorescent analysis of HepG2 cells using ABIN7164301 at dilution of 1:100 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)