



[Go to Product page](#)

Datasheet for ABIN390160

anti-Neuregulin 1 antibody (AA 198-229)

2 Images

1 Publication

Overview

Quantity:	400 µL
Target:	Neuregulin 1 (NRG1)
Binding Specificity:	AA 198-229
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Neuregulin 1 antibody is un-conjugated
Application:	Flow Cytometry (FACS), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	This NRG1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 198-229 amino acids from the Central region of human NRG1.
Clone:	RB01275-01276
Isotype:	Ig Fraction
Purification:	This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Target Details

Target:	Neuregulin 1 (NRG1)
Alternative Name:	NRG1 (NRG1 Products)

Target Details

Background:	Neuregulin 1 (NRG1) was originally identified as a 44-kD glycoprotein that interacts with the NEU/ERBB2 receptor tyrosine kinase to increase its phosphorylation on tyrosine residues. It is known that an extraordinary variety of different isoforms are produced from the NRG1 gene by alternative splicing. These isoforms include heregulins (HRGs), glial growth factors (GGFs) and sensory and motor neuron-derived factor (SMDF). They are tissue-specifically expressed and differ significantly in their structure. The HRG isoforms all contain immunoglobulin (Ig) and epidermal growth factor-like (EGF-like) domains. GGF and GGF2 isoforms contain a kringle-like sequence plus Ig and EGF-like domains, and the SMDF isoform shares only the EGF-like domain with other isoforms. The receptors for all NRG1 isoforms are the ERBB family of tyrosine kinase transmembrane receptors. Through interaction with ERBB receptors, NRG1 isoforms induce the growth and differentiation of epithelial, neuronal, glial, and other types of cells.
Molecular Weight:	70392
Gene ID:	3084
NCBI Accession:	NP_001153467 , NP_001153471 , NP_001153473 , NP_001153477 , NP_001153480 , NP_039250 , NP_039251 , NP_039252 , NP_039253 , NP_039254 , NP_039256 , NP_039258
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:	IHC-P: 1:50~100. FC: 1:10~50
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	Purified polyclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Maintain refrigerated at 2-8 °C for up to 6 months. For long term storage store at -20 °C in small

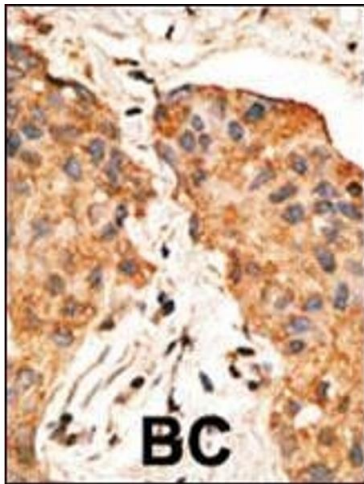
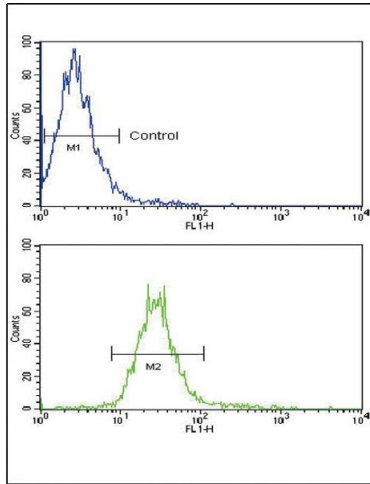
Handling

aliquots to prevent freeze-thaw cycles.

Expiry Date: 6 months

Publications

- Product cited in:
- Schwab, Sison, Meade, Broniowska, Corbett, Ebert: "Decreased Sirtuin Deacetylase Activity in LRRK2 G2019S iPSC-Derived Dopaminergic Neurons." in: **Stem cell reports**, Vol. 9, Issue 6, pp. 1839-1852, (2018) ([PubMed](#)).
- Takumida, Takumida, Katagiri, Anniko: "Localization of sirtuins (SIRT1-7) in the aged mouse inner ear." in: **Acta oto-laryngologica**, pp. 1-12, (2015) ([PubMed](#)).
- He, Hu, Shi, Weidert, Lu, Xu, Huang, Kelley, Xie: "Activation of the aryl hydrocarbon receptor sensitizes mice to nonalcoholic steatohepatitis by deactivating mitochondrial sirtuin deacetylase Sirt3." in: **Molecular and cellular biology**, Vol. 33, Issue 10, pp. 2047-55, (2013) ([PubMed](#)).
- Kamarajan, Alhazzazi, Danciu, Dsilva, Verdin, Kapila: "Receptor-interacting protein (RIP) and Sirtuin-3 (SIRT3) are on opposite sides of anoikis and tumorigenesis." in: **Cancer**, Vol. 118, Issue 23, pp. 5800-10, (2012) ([PubMed](#)).
- Parker, Vazquez-Manrique, Tourette, Farina, Offner, Mukhopadhyay, Orfila, Darbois, Menet, Tissenbaum, Neri: "Integration of β -catenin, sirtuin, and FOXO signaling protects from mutant huntingtin toxicity." in: **The Journal of neuroscience : the official journal of the Society for Neuroscience**, Vol. 32, Issue 36, pp. 12630-40, (2012) ([PubMed](#)).



Flow Cytometry

Image 1. Flow cytometric analysis of NCI- cells using NRG1 Antibody (Center) (bottom histogram) compared to a negative control (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Immunohistochemistry (Paraffin-embedded Sections)

Image 2. Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry, clinical relevance has not been evaluated. BC = breast carcinoma, HC = hepatocarcinoma.