Pro-neuregulin-1, membrane-bound isoform

Catalog No: #AP79214

Package Size: #AP79214-1 50ug #AP79214-2 100ug #AP79214-3 1mg

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

Product Name	Pro-neuregulin-1, membrane-bound isoform
Brief Description	Recombinant Protein
Host Species	E.coli
Purification	Greater than 90% by SDS-PAGE
Species Reactivity	Human
Immunogen Description	20-242AA
Other Names	GGF,HGL,HRGA,NDF,SMDF
Accession No.	Q02297Gene name:NRG1
Uniprot	Q02297
GeneID	3084;
Calculated MW	24.53
Tag Info	His
Formulation	50mM NaH2PO4, 500mM NaCl Buffer with 500mM Imidazole,10%glycerol(PH8.0)
Storage	Store at -20C. (Avoid repeated freezing and thawing.)Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

Background

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 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 ERRB3 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.

References

Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

Note: This product is for in vitro research use only