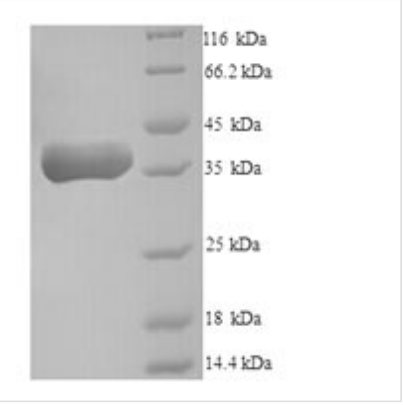
Recombinant Human Pro-neuregulin-2, membrane-bound isoform (NRG2), partial

Product Code	CSB-YP016078HU
Relevance	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. May also promote the heterodimerization with the EGF receptor.
Abbreviation	Recombinant Human NRG2 protein, partial
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	O14511
Alias	Divergent of neuregulin-1 Short name: DON-1 Neural- and thymus-derived activator for ERBB kinases Short name: NTAK
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	CYSPSLKSVQDQAYKAPVVVEGKVQGLVPAGGSSSNSTREPPASGRVALVKV LDKWPLRSGGLQREQVISVGSCVPLERNQRYIFFLEPTEQPLVFKTAFAPLDT NGKNLKKEVGKILCTDCATRPKLKKMKSQTGQVGEKQSLKCEAAAGNPQPSY RWFKDGKELNRSRDIRIKYGNGRKNSRLQFNKVKVEDAGEYVCEAENILGKDT VRGRLYVNSVSTTLSSWSGHARKCNETAKSYCVNGGVCYYIEGINQLSCKCP NGFFGQRCLEKLPLRLYMPDPKQKAEELYQKR
Research Area	Neuroscience
Source	Yeast
Target Names	NRG2
Protein Names	Recommended name: Pro-neuregulin-2, membrane-bound isoform Short name= Pro-NRG2 Cleaved into the following chain: 1. Neuregulin-2 Short name= 2. NRG-2 Alternative name(s): Divergent of neuregulin-1 Short name= DON-1 Ne
Expression Region	112-405aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	34.8kDa
Protein Length	Extracellular Domain
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The recombinant Human NRG2 was expressed with the amino acid range of 112-405. The expected molecular weight for the NRG2 protein is calculated to be 34.8 kDa. This protein is generated in a yeast-based system. The NRG2 gene fragment has been modified by fusing the N-terminal 6xHis tag, providing convenience in detecting and purifying the recombinant NRG2 protein during the following stages.

The human pro-neuregulin-2 (NRG2) is a membrane-bound isoform of the NRG2 protein. pro-NRG2 is initially anchored to the cell membrane. Through proteolytic processing, it can be cleaved to release soluble fragments that act as ligands for ErbB receptor tyrosine kinases. Activation of ErbB receptors triggers intracellular signaling cascades that regulate cell growth, survival, and differentiation. NRG2 is expressed in various tissues, including the nervous system and the heart, suggesting its diverse functions in both neuronal and cardiac development. Research on pro-NRG2 spans neural and cardiovascular biology, exploring its contributions to cellular processes and its potential implications in diseases such as cancer and heart disorders.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.
Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.