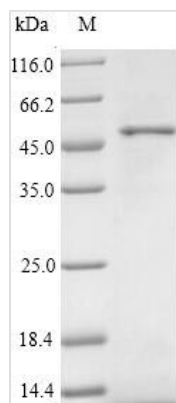




Recombinant Human Protein Wnt-2 (WNT2)

Product Code	CSB-YP026133HU
Relevance	Ligand for members of the frizzled family of seven transmembrane receptors. Probable developmental protein. May be a signaling molecule which affects the development of discrete regions of tissues. Is likely to signal over only few cell diameters.
Abbreviation	Recombinant Human WNT2 protein
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.	P09544
Alias	Int-1-like protein 1 Int-1-related protein
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	SWWYMRATGGSSRVMCDNVPGLVSSQRQLCHRHPDVMRAISQGVAEWTAECQHQRQHRWNCNTLDRDHSLFGRVLLRSSRESAFVYAISSAGVVFAITRACSQGEVKSCSCDPKMKMGSAKDSKGIFDWGGCSDNIDYGIFARAFVDAKERKGKDARALMNLHNNRAGRKAVKRFLKQECKCHGVSGSCTLRTCWLAMADFRKTGDYLWRKYNGAIQVVMNQDGTGFTVANERFKKPTKNDLVYFENSPDYCIRDREAGSLGTAGRVCNLTSRGMDSCEVMCCGRGYDTSHVTRMTKCGCKFHWCCA VRCQDCLEALDVHTCKAPKNADWTTAT
Research Area	Stem Cells
Source	Yeast
Target Names	WNT2
Protein Names	Recommended name: Protein Wnt-2 Alternative name(s): Int-1-like protein 1 Int-1-related protein Short name= IRP
Expression Region	26-360aa
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	39.6kDa
Protein Length	Full Length of Mature Protein
Image	



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

Description

The first step of making this recombinant Human WNT2 protein is synthesizing the WNT2 gene, the synthesized gene is then cloned into an expression vector which is a cDNA plasmid that includes a promoter sequence and an antibiotic-resistant gene. It also has N-terminal 6xHis tag encoding a fusion tag for downstream protein purification or identification. The antibiotic-resistant gene enables the selection of cells carrying the plasmid in antibiotic-based media and then transfects cells with a DNA vector that contains the template and then culturing the cells so that they transcribe and translate the desired protein. The recombinant WNT2 protein is purified by ion-exchange chromatography or affinity purification. And the purity is 90%+ by SDS-PAGE.

WNT2 is an autocrine growth and differentiation factor specific for hepatic sinusoidal endothelial cells (HSECs), which act synergistically with the VEGF signaling pathway. Studies have shown that targeted disruption of the WNT2 gene causes placental defects. WNT2 has been implicated in the occurrence and progression of multiple human malignancies, including lung, breast, and colorectal cancers. WNT2 expression was found to be upregulated in human colorectal and gastric cancers, while WNT2 short interfering RNA (siRNA) or monoclonal antibodies can suppress tumor growth. WNT2 regulates beta-catenin localization in granulosa cells, and WNT2/-catenin signaling helps modulate granulosa cell proliferation.

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

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