

32-20583: Recombinant Human Wnt-9b(Discontinued)

Alternative Name : WNT15, WNT14B, UNQ6973/PRO21956

Description

Source:CHO cells

Formerly known as Wnt-15 or Wnt-14b, Wnt-9b is a secreted glycoprotein belonging to the Wnt family of signaling proteins that are critically involved in maintaining the integrity of both embryonic and adult tissues. Wnt-9b is primarily expressed in adult kidneys and during late embryogenesis, and shares with other Wnt family members the same highly conserved lipid-modified, cysteine-rich domain essential for cell signaling. As is true for most Wnt family members, Wnt-9b functions through the biochemical process known as the canonical Wnt pathway. In this process, Wnt proteins bind to and activate seven-pass transmembrane receptors of the Frizzled family, and ultimately results in the disruption of Beta -catenin degradation. Intracellular accumulation of Beta -catenin increases translocation of the protein into the nucleus, where it binds to TCF/LEF transcription factors to promote the expression of numerous genes. In this manner, Wnt signaling induces and maintains transformed phenotype, and, in certain embryonic cell lines, supports self-renewal in the absence of significant differentiation. While increased Wnt/Beta -catenin signaling is associated with tumorigenesis in a diverse set of human cancers, lack of Wnt signaling disrupts transcriptional activation of tumor suppressor genes, and has been shown to result in neoplastic transformation, oncogenesis, and human degenerative diseases. Altered Wnt-9b expression has been shown to result in the underdevelopment of the kidneys, and incomplete lip and cleft fusion in mice. Recombinant Human Wnt-9b is a monomeric glycoprotein containing 335 amino acid residues and has a calculated molecular weight of 36.9 kDa. Due to glycosylation, Recombinant Human Wnt-9b migrates at an apparent molecular weight of approximately 49-54 kDa by SDS-PAGE analysis under non-reducing conditions.

Product Info

Amount : 5 µg / 20 µg

Purification : Purity:>= 95% by SDS-PAGE gel and HPLC analyses.

Content : This recombinant protein is supplied in lyophilized form.

Amino Acid : SYFGLTGREV LTPFPGLGTA AAPAQGGAHL KQCDLLKLSR RQKQLCRREP GLAETLRDAA HGLLLECQFQ
FRHERWNC SL EGRMGLLKRG FKETAFLYAV SSAALHTLA RACSAGRMER CTCDDSPGLE
SRQAWQWGVC GDNLYSTKF LSNFLGSKRG NKDLRARADA HNTHVGKAV KSGLRRTCKC
HGVSGSCAVR TCWKQLSPFR ETGQVLKLRV DSAVKVSSAT NEALGRLELW APARQGS LTK
GLAPRSGDLV YMEDSPSFCR PSKYSPTAG RVCSREASCS SLCCGRGYDT QSRLVAFSCH
CQVQWCCYVE CQQCVQEELV YTCKH

Application Note

Determined by its ability to induce alkaline phosphatase production by CCL-226 cells.