



Recombinant Human Wnt-1

20150227BB



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	100-367
Size:	10 µg
Lot. No.:	According to product label

Scientific Background

Gene-ID (NCBI):	7471
Synonyms:	WNT1; INT1

Wnt-1 is a secreted protein that signals through the Frizzled family of cell surface receptors and is required for normal embryonic development. Wnt-1 activation induces a complex signaling cascade that ultimately leads to the increased expression of over fifty genes. An important component of Wnt-1 signaling is the stabilization, and resulting accumulation, of the intracellular signaling protein, beta-catenin. Wnt signaling induces and maintains the transformed phenotype and, in certain embryonic cell lines, supports self renewal in the absence of significant differentiation. Elevated levels of Wnt proteins are associated with tumorigenesis and are present in numerous human breast cancers. Mature human Wnt-1 is a glycosylated protein containing 343 amino acid residues. Recombinant human Wnt-1 is a 38.4 kDa, non-glycosylated protein containing 343 amino acid residues.

Sequence

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ANSSGRWWGI VNVASSTNLL TDSKSLQLVL EPSLQLLSRK
QRRLLIRQNPQ ILHSVSGGLQ SAVRECKWQF RNRRWNCPTA
PGPHLFGKIV NRGCRETAFI FAITSAGVTH SVARSCSEGS
IESCTCDYRR RGPGGPDWHW GGCSDNIDFG RLFGRFVDS
GEKGRDLRFL MNLHNEAGR TTVFSEMRQE CKCHGMSGSC
TVRTCWMRLP TLRAVGDVLR DRFDGASRVL YGNRGSNRAS
RAELLRLEPE DPAHKPPSPH DLVYFEKSPN FCTYSGRLGT
AGTAGRACNS SSPALDGCEL LCCGRGHRTR TQRVTERCNC
TFHWCCHVSC RNCTHTRVLH ECL
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Database References

Protein RefSeq:	NP-005421
Uniprot ID:	P04628
mRNA RefSeq:	NM_005430

Product Specifications

Expressed in	E. coli
Purity	> 98% by SDS-PAGE & HPLC analyses
Endotoxin level	< 0.1 ng /µg of protein (<1EU/µg).
Formulation	lyophilized
Length (aa):	343
MW:	38.4 kDa

Biological Activity: The ED50 was determined by its ability to enhance BMP-2 induced alkaline phosphatase production by murine ATDC5 cells. The expected ED50 for this effect is 1.5 - 2.5 ng/ml in the presence of 200 ng/ml of human BMP-2.



AVOID REPEATED FREEZE AND THAW CYCLES!