Recombinant Human WIF1 protein

Cat. No. WIF1-577H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human Wnt Inhibitory Factor 1 is produced by our Mammalian expression system and the target gene encoding Gly29-Trp379 is expressed with a 6His tag at the C-terminus.
Species	Human
Source	HEK293
ProteinLength	29-379 a.a.
Description	WIF (Wnt Inhibitory Factor) is a secreted protein that binds to Wnt proteins and inhibits their activity. The protein is synthesized as a 379 amino acid (AA) molecule that contains an N-terminal signal sequence, 150 AA WIF domain, 5 EGF-like repeats, and a hydrophilic domain at the carboxy terminus. In situ hybridization analysis from the frog, Xenopus laevis, and zebrafish indicate that the message is highly expressed in presomitic mesoderm, the notochord, anterior regions of the brain, branchial arches, nasal placodes, and otic vescicles. WIF inhibits secondary axis induction by Wnts and promotes secondary axis induction by Chordin in Xenopus embryos. In vitro, WIF binds to Drosophila Wingless and Xenopus Wnt8 proteins. WIF-1 is implicated as an early event tumor suppressor in cancers of the prostate, breast, lung and bladder. However, WIF-1's role in carcinogenesis may not be that simple since in other cancer types, such as colon adenocarcinoma, WIF facilitates tumorigenesis. Human WIF-1 shares 94% and 82% amino acid identity with mouse and frog, respectively.

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Form	Lyophilized from a 0.2 μm filtered solution of 10mM HAc-NaAc, 150mM NaCl, 0.5% CHAPS, pH 4.0.
AA Sequence	GPPQEESLYLWIDAHQARVLIGFEEDILIVSEGKMAPFTHDFRKAQQRMPAIPVNIHS MNFTWQAAGQAEYFYEFLSLRSLDKGIMADPTVNVPLLGTVPHKASVVQVGFPCLG KQDGVAAFEVDVIVMNSEGNTILKTPQNAIFFKTCQQAECPGGCRNGGFCNERRIC ECPDGFHGPHCEKALCTPRCMNGGLCVTPGFCICPPGFYGVNCDKANCSTTCFNG GTCFYPGKCICPPGLEGEQCEISKCPQPCRNGGKCIGKSKCKCSKGYQGDLCSKPV CEPGCGAHGTCHEPNKCQCQEGWHGRHCNKRYEASLIHALRPAGAQLRQHTPSL KKAEERRDPPESNYIWVDHHHHHH	
Endotoxin	Less than 0.1 ng/μg (1 IEU/μg) as determined by LAL test.
Purity	Greater than 95% as determined by reducing SDS-PAGE.
Storage	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 μg/ml

GENE INFORMATION

Gene Name	WIF1 WNT inhibitory factor 1 [Homo sapiens]
Official Symbol	WIF1
Synonyms	WIF1; WNT inhibitory factor 1; wnt inhibitory factor 1; WIF-1
Gene ID	11197

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mRNA Refseq	NM_007191
Protein Refseq	NP_009122
MIM	605186
UniProt ID	Q9Y5W5

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