

32-20584: Recombinant Human sFRP-4(Discontinued)

Alternative Name : Secreted frizzled-related protein 4, DDC-4 (rat homologue)

Description

Source:CHO cells

Secreted Frizzled-Related Proteins (sFRPs) are a family of glycosylated Wnt antagonists characterized by a conserved cysteine-rich domain that shares homology with the cysteine-rich, extracellular domain Frizzled proteins use for the binding of Wnt proteins and receptors. Lacking the transmembrane and intracellular domains of the Frizzled proteins, sFRPs function as soluble modulators of the Wnt signaling pathway through the direct binding of Wnt proteins to this cysteine-rich domain, and the resultant inhibition of Wnt receptor binding and signaling capabilities. sFRP-4 is widely distributed in a variety of embryonic and adult tissues where it can function as a circulating antiangiogenic factor, a potent proapoptotic factor, an inhibitor of insulin secretion, and a suppressor of both tumor growth and metastatic potential through disruption of the Wnt signaling pathway. Research has demonstrated the existence of a direct correlation between the downregulation and/or absence of circulating sFRP-4 and the progression of several cancer types, including ovarian, endometrial, prostate and lung. Upregulation of circulating sFRP-4 has been linked to the deterioration of glucose metabolism in the case of type 2 diabetes, as well as the suppression of the keratinocyte hyperproliferation and epidermal hyperlasia that are definitive of psoriasis. The CHO cell-derived Recombinant Human sFRP-4 is a glycoprotein of 328 amino acid residues that contains a cysteine-rich, Frizzled-homologous domain. The calculated molecular weight of CHO cell-derived Recombinant Human sFRP-4 is 37.8 kDa; however, due to glycosylation, the protein migrates at an apparent molecular weight of approximately 55 - 65 kDa by SDS-PAGE analysis under reducing conditions.

Product Info

Amount : 5 µg / 25 µg

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

Content : This recombinant protein is supplied in lyophilized form.

Amino Acid : VRGAPCEAVR IPMCRHMPWN ITRMPNHLHH STQENAILAI EQYEELVDVN CSAVLRFFLC AMYAPICTLE
FLHDPIKPKC SVCQRARDDC EPLMKMYNHS WPESLACDEL PVYDRGVCIS PEAIVTDLPE DVKWIDITPD
MMVQERPLDV DCKRLSPDRC KCKVKPTLA TYLSKNYSYV IHAKIKAVQR SGCNEVTTVV DVKEIFKSSS
PIPRTQVPLI TNSSCQCPHI LPHQDVLIMC YEWRSRMLL ENCLVEKWRD QLSKRSIQWE ERLQEQRRTV
QDKKKTAGRT SRSNPPKPKG KPPAPKPASP KKNIKTRSAQ KRTNPKRV

Application Note

Determined by its ability to decrease alkaline phosphatase activity in CCL-226 cells when treated with 25ng/ml of Murine Wnt-3a.