

Active sFRP-4, Human Recombinant

02/21

CATALOG NO:	P1709-25 25 µg
ALTERNATE NAMES:	SFRP4; FRP-4; FRPHE; PYL; Frizzled protein, human endometrium; FRP-AP; frpHE; FRPHEMGC26498; FrzB2; Secreted frizzled-related protein 4; DDC-4
MOL. WT.	37.8 kDa
NCBI GENE ID:	6424
ACCESSION NO.:	Q6FHJ7
PURITY:	≥ 95% by SDS-PAGE gel and HPLC analyses
SOURCE:	CHO cells
AMINO ACID SEQUENCE:	The target is expressed with the sequence (Val 19 to Val 346) of Human sFRP-4.
FORM:	Lyophilized protein powder
RECONSTITUTION:	Reconstitute to desired concentration using sterile water.
BIOLOGICAL ACTIVITY:	Determined by its ability to decrease alkaline phosphatase activity in CCL-226 cells when treated with 25ng/ml of Murine Wnt-3a.
STORAGE CONDITIONS:	Store at -20 °C to -80 °C. After reconstitution, divide into small aliquots and store at -20 °C to -80 °C. Avoid repeated freeze-thaw cycles.
DESCRIPTION:	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.

RELATED PRODUCTS:

Human CellExp™ Frizzled-4 / FZD4 Protein, Human Recombinant (Cat. No. P1027)
Human CellExp™ Frizzled-7 / FZD7 Protein, Human Recombinant (Cat. No. P1029)
Human CellExp™ Frizzled-2 / FZD2 Protein, Human Recombinant (Cat. No. P1026)
Wnt Antagonist, C59 (Cat. No. 2063)
Human CellExp™ Frizzled-5 / FZD5 Protein, Human Recombinant (Cat. No. P1028)

FOR RESEARCH USE ONLY! Not to be used on humans.