

SFRP4 active protein

SFRP4 Protein, Human, Recombinant (His Tag)

CATALOG #
AAA257921

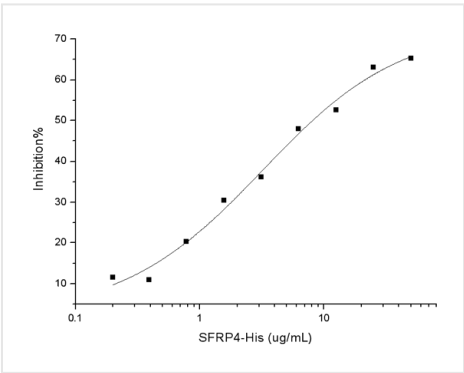
HOST
HEK293 Cells

PRODUCT SYNONYMS

SFRP4; SFRP4 Protein; Human; Recombinant (His Tag); Human sFRP4 Protein (His Tag); FRP-4 Protein; FRPHE Protein; sFRP-4 Protein; secreted frizzled-related protein 4; SFRP4 active protein

PRODUCT SPECIFICATIONS

Host	HEK293 Cells
Purity/Purification	>90% as determined by SDS-PAGE
Form/Format	Lyophilized from sterile PBS, pH7.4. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hard copy of CoA.
Sequence	Met1-Val34 6
Species	Human
Activity	Measured by its ability to inhibit Wnt3a-induced alkaline phosphatase production by C3H10T 1/2 2A6 mouse embryonal fibroblast cells. The ED50 for this effect is typically 1-6ug/mL in the presence of 20ng/mL of Wnt3a.
Endotoxin	<1.0EU per ug of the protein as determined by the LAL method
Predicted N Terminal	Ala 22
Tag	C-His
Protein Construction	A DNA sequence encoding the human sFRP4 (NP_003005.2)(Met 1-Val 346) was expressed with a C-terminal polyhistidine tag.
Reconstitution	A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice.



SDS-PAGE

Application Data

Measured by its ability to inhibit Wnt3a-induced alkaline phosphatase production by C3H10T 1/2 2A6 mouse embryonal fibroblast cells. The ED50 for this effect is typically 1-6 ug/mL in the presence of 20 ng/mL of Wnt3a.

ADDITIONAL INFORMATION

Related Product Information for SFRP4 active protein

Background: SFRP family consists of five secreted glycoproteins in humans acting as extracellular signaling ligands. Each is approximately 3 amino acids in length and contains a cysteine-rich domain (CRD) that shares 3-5% sequence homology with the CRD of Frizzled (Fz) receptors, a putative signal sequence, and a conserved hydrophilic carboxy-terminal domain. SFRPs act as soluble modulators of Wnt signaling, counteracting Wnt-induced effects at high concentrations and promoting them at lower concentrations. SFRPs are able to bind Wnt proteins and Fz receptors in the extracellular compartment. The interaction between SFRPs and Wnt proteins prevents the latter from binding the Fz receptors. The Wnt pathway plays a key role in embryonic development, cell differentiation and cell proliferation. SFRP4 is a member of the SFRP family that contains a cysteine-rich domain homologous to the putative Wnt-binding site of Frizzled proteins called FZ domain and a NTR domain. Mouse SFRP4 is highly expressed in the ovary, and is localized to granulosa cells of periovulatory follicles and corpora lutea. It plays a critical role in placental development and implantation, and is also an important factor in the development of the decidual fibrinoid zone, and in trophoblast apoptosis.

References

Abu-Jawdeh G.M., et al.,(1999), Differential expression of frpHE: a novel human stromal protein of the secreted frizzled gene family, during the endometrial cycle and malignancy. Lab. Invest. 79:439-447.Berndt T., et al., (2003), Secreted frizzled-related protein 4 is a potent tumor-derived phosphaturic agent.J. Clin. Invest. 112:785-794.Ota T., et al.,(2004), Complete sequencing and characterization of 21,243 full-length human cDNAs.Nat. Genet. 36:40-45.

NCBI AND UNIPROT INFORMATION

NCBI GI #	170784838
NCBI GeneID	6424
NCBI Accession #	NP_003005.2
NCBI GenBank Nucleotide #	NM_003014.3
UniProt Accession #	Q6FHHJ7; O14877; Q05BG7; Q1ZYW2; Q4G124; Q6FHM0; Q6PD64; B4DYC1
Molecular Weight	39,827 Da
NCBI Official Full Name	secreted frizzled-related protein 4
NCBI Official Synonym Full Names	secreted frizzled-related protein 4
NCBI Official Symbol	SFRP4
NCBI Official Synonym Symbols	FRP-4; FRPHE; sFRP-4
NCBI Protein Information	secreted frizzled-related protein 4; frizzled protein, human endometrium; secreted frizzled-related protein 4; secreted frizzled-related protein 4
UniProt Protein Name	Secreted frizzled-related protein 4

UniProt Gene Name	SFRP4
UniProt Synonym Gene Names	FRPHE; sFRP-4; FrpHE
UniProt Entry Name	SFRP4_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/hek293-cells-active-protein/sfrp4/257921>