

Recombinant Human sFRP1/SARP2 Protein (His Tag)

Catalog No. PKSH031491

Note: Centrifuge before opening to ensure complete recovery of vial contents.

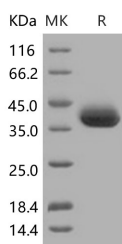
Description

Synonyms	FRP;FRP-1;FRP1;FrzA;SARP2
Species	Human
Expression Host	HEK293 Cells
Sequence	Met 1-Lys 314
Accession	NP_003003.3
Calculated Molecular Weight	34.0 kDa
Observed molecular weight	38 kDa
Tag	C-His
Bioactivity	Measured by its ability to inhibit proliferation of HeLa human cervical epithelial carcinoma cells. The ED50 for this effect is typically 2. 5-10 µg/ml.

Properties

Purity	> 97 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 97 % as determined by reducing SDS-PAGE.

Background

Secreted frizzled-related protein 1, also known as sFRP1, is a 35 kDa prototypical member of the SFRP family. SFRP

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family consists of five secreted glycoproteins in humans acting as extracellular signaling ligands. Each is approximately 300 amino acids in length and contains a cysteine-rich domain (CRD) that shares 30-50% 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. The deregulation of this critical developmental pathway occurs in several human tumor entities. Mouse sFRP1 is highly expressed in kidney and embryonic heart, as well as in the eye, where it is principally localized to the ciliary body and the lens epithelium.