Mouse sFRP1 Protein (His Tag)

Catalog Number: **50033-M08S**

General Information

Gene Name Synonym:

2210415K03Rik; AW011917; AW107218; AW742929; sFRP-1

Protein Construction:

A DNA sequence encoding the mouse SFRP1 (AAC53145.1) (Met1-Lys314) was expressed with a polyhistidine tag at the C-terminus.

Source: Mouse

Expression Host: CHO Stable Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE.

Endotoxin:

< 1.0 EU per μg protein as determined by the LAL method.

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Ser 32

Molecular Mass:

The recombinant mouse SFRP1 consists of 283 amino acids and predicts a molecular mass of 32.6 kDa.

Formulation:

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

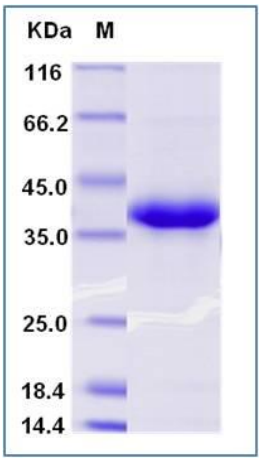
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Secreted frizzled-related protein 1, also known as sFRP1, is a 35 kDa prototypical member of the SFRP family. SFRP family consists of five secreted glycoproteins in humansacting 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 ofFrizzled(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 bindWntproteins 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.

References

1.Finch P.W., *et al.*,(1997), Purification and molecular cloning of a secreted, Frizzled-related antagonist of Wnt action. Proc. Natl. Acad. Sci. U.S.A. 94:6770-6775. 2.Melkonyan H.S., *et al.*, (1997), SARPs: a family of secreted apoptosis-related proteins.Proc. Natl. Acad. Sci. U.S.A. 94:13636-13641. 3.Zhou Z., *et al.*,(1998), Up-regulation of human secreted frizzled homolog in apoptosis and its down-regulation in breast tumors.Int. J. Cancer 78:95-99.