

Recombinant Mouse sFRP2 Protein (His tag)

Cat.NO.: TP07024

3th Edition

Synonyms: AI851596; Sdf5

Description: The Secreted frizzled-related protein (SFRP) family consists of five secreted glycoproteins in humans (SFRP1~5) that act as extracellular signaling ligands. Each SFRP 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 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. sFRP2 is a member of the SFRP family acting as soluble modulators of Wnt signaling and contains a cysteine-rich domain homologous to the putative Wnt-binding site of Frizzled proteins called FZ domain and a NTR domain. sFRP2 inhibits hypoxia induced endothelial cell apoptosis and increases endothelial cell migration. It prevents mesoderm specification and maintains the cells in the undifferentiated state. SFRP2 is also a novel stimulator of angiogenesis that stimulates angiogenesis via a calcineurin/NFAT pathway, thus is regarded as a favorable target for the inhibition of angiogenesis in solid tumors. Mouse sFRP2 is highly expressed in the eye and is also detected in heart and lung at low level.

Form: PBS**Molecular Weight:** 32.5 kDa**Sequences:** Met 1-Cys 295**Purity:** > 95% by HPLC**Concentration:****Endotoxin Level:** <1.0 EU per 1 ug of protein (determined by LAL method)**Storage:** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.