

Product Sheet

SFRP5, human recombinant

Catalog # S5-050; S5-250; S5-1000

Description SFRP5 (secreted Frizzled-related protein 5) is one of the 5 mammalian secreted Frizzled-related proteins that contain a cysteine-rich domain (CRD) homologous to that in WNT receptor Frizzleds. Because the CRD binds to WNTs and competes with Frizzled, SFRPs are considered soluble WNT inhibitors.

A recent study (*Ouchi, et al. Science. 2010, 329: 454*) showed that SFRP5 is an anti-inflammatory adipokine whose expression is perturbed in models of obesity and type 2 diabetes. SFRP5 exerts such effects by binding to WNT-5a secreted by inflammatory cells.

This product is the N-terminal CRD of human SFRP5 (aa1-176) expressed in **E. coli** with the following amino acid sequence:

MRAAAAGGGV	RTAALALLG	ALHWAPARCE	EYDYYGWQAE	PLHGRSYSKP
PQCLDIPADL	PLCHTVGYKR	MRLPNLLEHE	SLAEVKQQAS	SWLPLLAKRC
HSDTQVFLCS	LFAPVCLDRP	IYPCRSLCEA	VRAGCAPLME	AYGFPWPEML
HCHKFPLDND	LCIAVQFGHL	PATAPP		

The protein in the inclusion body was purified by a series of chromatography and refolded through stepwise dialysis.

Formulation Lyophilized in a filtered solution of PBS with 100mM Arginine.

Reconstitution Before reconstitution, a brief spin is recommend to drive down any material dislodged from the bottom of the tube. The lyophilized protein should be reconstituted in PBS or medium to a desired concentration.

Stability The lyophilized protein is stable for at least one year if stored at -80 degree C. Reconstituted protein is stable for at least four weeks at 4 degree C, but should be stored in aliquots at -80 degree C for longer term. Avoid repeated freeze and thaw.

Purity Greater than 95% as determined by SDS-PAGE analysis

Biological Activity The activity has not been determined.

Country of Origin USA

For Research Use Only. Not for Use in Human.