

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human sFRP-5 in direct ELISAs.
Source	Monoclonal Mouse IgG _{2B} Clone # 707128
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human sFRP-5 Glu30-His317 Accession # Q5T4F7
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Neutralization Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Secreted Frizzled Related Protein-5 (sFRP-5), also known as SARP-3, belongs to a family of Wnt-binding proteins with homology to the ligand-binding domain of the Frizzled receptors. sFRPs are approximately 30-35 kDa in size and contain an N-terminal Frizzled-like domain with 10 conserved cysteines and a Netrin-like C-terminal domain (1-3). Mature human sFRP-5 shares 96% aa sequence identity with mouse and rat sFRP-2 (4). During embryonic development, sFRP-5 is expressed in the anterior visceral endoderm, neural tube, foregut epithelium, and proliferating and prehypertrophic chondrocytes (5-8). sFRP-5 activity is required for the development of foregut, liver, ventral pancreas, and somites (6, 7). In the adult, sFRP-5 is expressed in the retinal pigment epithelium and pancreas (4, 9). sFRP-5 binds and antagonizes the function of mammalian Wnt-5a and Wnt-11 as well as *Xenopus* Xwnt-8, resulting in an inhibition of both canonical and non-canonical Wnt signaling (7, 9, 10). sFRP-5 down-regulation is common in breast and gastric cancer cells and is correlated with poor prognosis (11-13). It functions as a tumor suppressor by inhibiting epithelial-mesenchymal transition, invasiveness, and tumorigenicity of ovarian cancer cells (14). sFRP-5 plays an important role in maintaining glucose handling and insulin sensitivity (10). It is secreted by adipocytes and is down-regulated in mouse models of obesity and type 2 diabetes (10).

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