

#### DESCRIPTION

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse sFRP-2 in direct ELISAs and Western blots. In these formats, less than 1% cross-reactivity with recombinant human SARP2 is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse sFRP-2 (R&D Systems, Catalog # 1169-FR) Leu25-Cys295 Accession # AAB70795
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

#### 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.

	Recommended Concentration	Sample
<b>Western Blot</b>	0.1 µg/mL	Recombinant Mouse sFRP-2 (Catalog # 1169-FR)

#### PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

#### BACKGROUND

Secreted Frizzled Related Proteins (sFRPs) are a family of vertebrate proteins which contain homology to the ligand-binding domain of the Frizzled family of transmembrane receptors. The sFRPs are approximately 30 - 35 kDa in size and are comprised of 3 domains: a signal sequence; a cysteine-rich domain (CRD) of about 110 amino acids (aa) with a high degree of similarity to the Frizzled proteins, including 10 conserved cysteines, and a 175 aa conserved hydrophilic carboxy terminal region. Because sFRPs contain a CRD very similar to the region responsible for binding Wnt ligands in Frizzleds, sFRPs are thought to act as soluble antagonists of Wnt signals.

sFRP-2, also known as SARP-1, SDF-5, and FRP-2, is expressed during mouse embryogenesis in the eye, brain, neural tube, craniofacial mesenchyme, joints, testis, pancreas, kidney and regions of smooth muscle cell development. Expression in the adult animal has been detected in the eye, heart, lung, along with preadipose and adipose tissues in mice and humans. Mouse and human sFRP-2 proteins share 98% aa identity, and related proteins have also been identified in chick, rabbit, and frog. A variety of activities have been reported for sFRP-2 including an increased resistance to apoptosis, antagonism of Xwnt -8 signaling in *Xenopus*, regulation of Wnt-4 signaling (with sFRP-1) in renal organogenesis, and inhibition of the migration of glioma cells (1 - 7).

#### References:

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6. Ladher, R. *et al.* (2000) *Dev. Biol.* **218**:183.
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