

#### DESCRIPTION

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse sFRP-3 in direct ELISAs and Western blots.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse sFRP-3 Ala33-Ser323 Accession # P97401
<b>Conjugate</b>	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
<b>Formulation</b>	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.

<b>Western Blot</b>	Optimal dilution of this antibody should be experimentally determined.
<b>Immunohistochemistry</b>	Optimal dilution of this antibody should be experimentally determined.

#### PREPARATION AND STORAGE

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

#### BACKGROUND

Secreted Frizzled Related Protein 3 (sFRP-3) was originally identified in bovine cartilage for its chondrogenic ability. Human, mouse, chick and *Xenopus* clones have also been isolated. sFRP-3 is often referred to as FRZB, other names also include Fritz, Frzb1, and FRP-3. At the amino acid sequence level, sFRP-3 is highly conserved. The mouse protein shares 76% identity with *Xenopus* and 92% with human proteins. The gene for mouse sFRP-3 has been localized to the central region of chromosome 2. Murine sFRP-3 is expressed in the primitive streak during gastrulation, as well as in the retina, foregut diverticulum, nervous system, and posterior mesoderm during development. In adult tissues, sFRP-3 expression, as determined by Northern blot, is detected in the heart, brain, spleen, skeletal muscle, kidney, and testis.

The N-terminal portion of sFRP-3 protein shows 50% amino acid identity to the corresponding region of the *Drosophila* frizzled gene product, a receptor for Wg/Wnt signals. The similarity of sFRP-3 with frizzled proteins is restricted to the N-terminal cysteine-rich domain (CRD) that contains at least ten cysteine residues with highly conserved spacing between them. sFRP-3 was subsequently shown to be a soluble antagonist of Wnt signals. It lacks all transmembrane domains of frizzled proteins but retains the ability to bind Wnts. Ectopic expression of sFRP-3 mRNA has been shown to interfere with the induction of secondary axes in *Xenopus* embryos injected with Xwnt-8 mRNA.

#### PRODUCT SPECIFIC NOTICES

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