

# Anti-SFRP4 Antibody

Catalog # ABO12746

### Specification

### Anti-SFRP4 Antibody - Product Information

ApplicationWBPrimary AccessionO6FHJ7HostRabbitReactivityHuman, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Secreted frizzled-related protein 4(SFRP4) detection. Testedwith WB in Human;Rat.

**Reconstitution** Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

### Anti-SFRP4 Antibody - Additional Information

Gene ID 6424

**Other Names** Secreted frizzled-related protein 4, sFRP-4, Frizzled protein, human endometrium, FrpHE, SFRP4, FRPHE

Calculated MW 39827 MW KDa

**Application Details** Western blot, 0.1-0.5 μg/ml, Human, Rat<br>

**Subcellular Localization** Secreted . Cytoplasmic in ovarian tumor cells.

**Tissue Specificity** 

Expressed in mesenchymal cells. Highly expressed in the stroma of proliferative endometrium. Expressed in cardiomyocytes. Shows moderate to strong expression in ovarian tumors with expression increasing as the tumor stage increases. In ovarian tumors, expression levels are inversely correlated with expression of CTNNB1 (at protein level).

Protein Name Secreted frizzled-related protein 4

**Contents** Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen E.coli-derived human SFRP4 recombinant protein (Position: E140-V346). Human SFRP4 shares 90%



and 90.3% amino acid (aa) sequence identity with mouse and rat SFRP4, respectively.

**Purification** Immunogen affinity purified.

**Cross Reactivity** No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the secreted frizzled-related protein (sFRP) family.

#### **Anti-SFRP4 Antibody - Protein Information**

Name SFRP4

Synonyms FRPHE

#### Function

Soluble frizzled-related proteins (sFRPS) function as modulators of Wnt signaling through direct interaction with Wnts. They have a role in regulating cell growth and differentiation in specific cell types (By similarity). SFRP4 plays a role in bone morphogenesis. May also act as a regulator of adult uterine morphology and function. May also increase apoptosis during ovulation possibly through modulation of FZ1/FZ4/WNT4 signaling (By similarity). Has phosphaturic effects by specifically inhibiting sodium-dependent phosphate uptake (PubMed:<a href="http://www.uniprot.org/citations/12952927">http://www.uniprot.org/citations/12952927</a>"

#### **Cellular Location**

Secreted. Note=Cytoplasmic in ovarian tumor cells

**Tissue Location** 

Expressed in mesenchymal cells. Highly expressed in the stroma of proliferative endometrium. Expressed in cardiomyocytes Shows moderate to strong expression in ovarian tumors with expression increasing as the tumor stage increases. In ovarian tumors, expression levels are inversely correlated with expression of CTNNB1 (at protein level).

#### Anti-SFRP4 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-SFRP4 Antibody - Images





Anti- SFRP4 Picoband antibody, ABO12746, Western blottingAll lanes: Anti SFRP4 (ABO12746) at 0.5ug/mlLane 1: Rat Cardiac Muscle Tissue Lysate at 50ugLane 2: SKOV Whole Cell Lysate at 40ugPredicted bind size: 40KDObserved bind size: 40KD

## Anti-SFRP4 Antibody - Background

Secreted frizzled-related protein 4 (SFRP4) is a member of the SFRP family that contains a cysteine-rich domain homologous to the putative Wnt-binding site of Frizzled proteins. It is mappaead to 7p14.1. The expression of SFRP4 in ventricular myocardium correlates with apoptosis related gene expression. And SFRP4 is a hub gene in a Type 2 Diabetes-associated gene coexpression module in human islets, and reduces glucose-induced insulin secretion through decreased  $\hat{l}^2$ -cell exocytosis.