10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SFRP1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9037A

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q8N474
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB21557
Calculated MW	35386
Antigen Region	26-55

Additional Information

Gene ID	6422
Other Names	Secreted frizzled-related protein 1, FRP-1, sFRP-1, Secreted apoptosis-related protein 2, SARP-2, SFRP1, FRP, FRP1, SARP2
Target/Specificity	This SFRP1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 26-55 amino acids from the N-terminal region of human SFRP1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	SFRP1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SFRP1
Synonyms	FRP, FRP1, SARP2
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. SFRP1 decreases intracellular beta-catenin levels (By similarity). Has antiproliferative effects on vascular cells, in vitro and in vivo, and can induce, in vivo, an angiogenic response. In vascular cell cycle, delays the G1 phase and entry into the S phase (By similarity). In kidney development, inhibits tubule formation and bud growth in metanephroi (By similarity). Inhibits WNT1/WNT4-mediated TCF- dependent transcription.
Cellular Location	Secreted. Note=Cell membrane or extracellular matrix-associated. Released by heparin-binding
Tissue Location	Widely expressed. Absent from lung, liver and peripheral blood leukocytes. Highest levels in heart and fetal kidney Also expressed in testis, ovary, fetal brain and lung, leiomyomal cells, myometrial cells and vascular smooth muscle cells. Expressed in foreskin fibroblasts and in keratinocytes

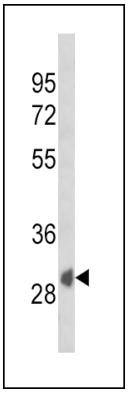
Background

SFRP1 encodes a member of the SFRP family that contains a cysteine-rich domain homologous to the putative Wnt-binding site of Frizzled proteins. Members of this family act as soluble modulators of Wnt signaling; epigenetic silencing of SFRP genes leads to deregulated activation of the Wnt-pathway which is associated with cancer.

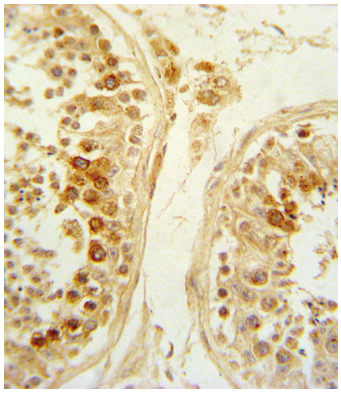
References

Huang,D., et.al., J. Cancer Res. Clin. Oncol. 136 (3), 395-401 (2010);
Yang,Z.Q., et.al., Int. J. Cancer 125 (7), 1613-1621 (2009).

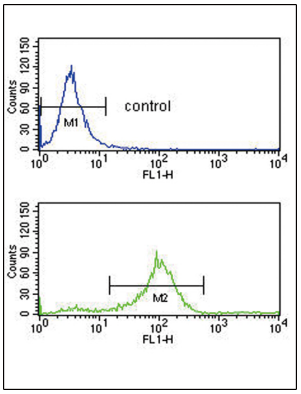
Images



Western blot analysis of SFRP1 Antibody (N-term) (Cat. #AP9037a) in K562 cell line lysates (35ug/lane). SFRP1 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human testis tissue reacted with SFRP1 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



SFRP1 Antibody (N-term) (Cat. #AP9037a) flow cytometry analysis of K562 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Citations

- Effects of secreted frizzled-related protein 1 on proliferation, migration, invasion, and apoptosis of colorectal cancer cells.
- Expression and prognostic value of SFRP1 and β-catenin in patients with glioblastoma.
- Deregulation of secreted frizzled-related proteins is associated with aberrant β-catenin activation in the carcinogenesis of oral submucous fibrosis.