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KREMEN1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7594a

Product Information

Application	WB, FC, E
Primary Accession	Q96MU8
Other Accession	Q90Y90, Q924S4, Q99N43
Reactivity	Human
Predicted	Mouse, Rat, Xenopus
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB10586
Calculated MW	51744
Antigen Region	53-82

Additional Information

Gene ID	83999
Other Names	Kremen protein 1, Dickkopf receptor, Kringle domain-containing transmembrane protein 1, Kringle-containing protein marking the eye and the nose, KREMEN1, KREMEN, KRM1
Target/Specificity	This KREMEN1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 53-82 amino acids from the N-terminal region of human KREMEN1.
Dilution	WB~~1:1000 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 prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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	KREMEN1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	KREMEN1
Synonyms	KREMEN, KRM1

Function	Receptor for Dickkopf proteins. Cooperates with DKK1/2 to inhibit Wnt/beta-catenin signaling by promoting the endocytosis of Wnt receptors LRP5 and LRP6. In the absence of DKK1, potentiates Wnt-beta- catenin signaling by maintaining LRP5 or LRP6 at the cell membrane. Can trigger apoptosis in a Wnt-independent manner and this apoptotic activity is inhibited upon binding of the ligand DKK1. Plays a role in limb development; attenuates Wnt signaling in the developing limb to allow normal limb patterning and can also negatively regulate bone formation. Modulates cell fate decisions in the developing cochlea with an inhibitory role in hair cell fate specification.
Cellular Location	Cell membrane {ECO:0000250|UniProtKB:Q99N43}; Single-pass type I membrane protein

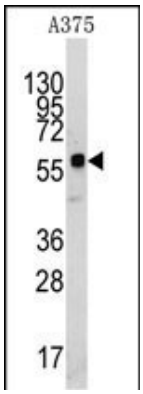
Background

KREMEN1 is a high-affinity dickkopf homolog 1 (DKK1) transmembrane receptor that functionally cooperates with DKK1 to block wingless (WNT)/beta-catenin signaling. This protein is a component of a membrane complex that modulates canonical WNT signaling through lipoprotein receptor-related protein 6 (LRP6). It contains extracellular kringle, WSC, and CUB domains.

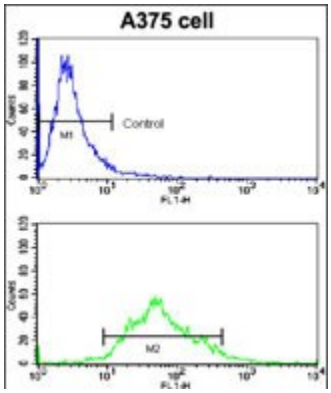
References

Mao,B., Nature 417 (6889), 664-667 (2002)
Nakamura,T., Biochim. Biophys. Acta 1518 (1-2), 63-72 (2001)

Images



Western blot analysis of anti-KREMEN1 Antibody (N-term) (Cat.#AP7594a) in A375 cell line lysates (35ug/lane).KREMEN1(arrow) was detected using the purified Pab.



Flow cytometric analysis of A375 cells using KREMEN1 Antibody (N-term) (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.