

KREMEN2 Antibody

Catalog # ASC11627

Specification

KREMEN2 Antibody - Product Information

Application WB, ICC **Primary Accession Q8NCW0**

Other Accession NP 757384, 27437008 Reactivity Human, Mouse

Host **Rabbit** Clonality **Polyclonal** Isotype laG

Calculated MW Predicted: 51 kDa

Observed: 54 kDa KDa

Application Notes KREMEN2 Antibody can be used for

detection of KREMEN2 by Western blot

starting at 1 µg/mL.

KREMEN2 Antibody - Additional Information

79412 Gene ID

Target/Specificity

KREMEN2; Multiple isoforms of KREMEN2 are known to exist. KREMEN2 antibody is predicted to not cross-react with other Kremen protein family members.

Reconstitution & Storage

KREMEN2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

Precautions

KREMEN2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

KREMEN2 Antibody - Protein Information

Name KREMEN2

Synonyms KRM2

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. 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.

Cellular Location

Membrane; Single-pass type I membrane protein

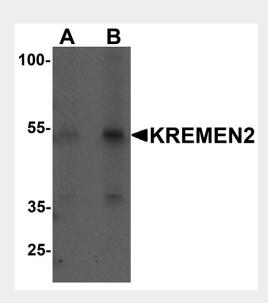


KREMEN2 Antibody - Protocols

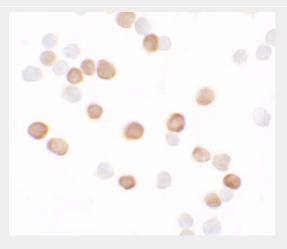
Provided below are standard protocols that you may find useful for product applications.

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

KREMEN2 Antibody - Images



Western blot analysis of KREMEN2 in HeLa cell lysate with KREMEN2 antibody at (A) 1 and (B) 2 μ g/mL.



Immunocytochemistry of KREMEN2 in HeLa cells with KREMEN2 antibody at 5 μg/ml.

KREMEN2 Antibody - Background

KREMEN2 Antibody: Kremen (Kringle containing protein marking the eye and the nose) proteins are





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type I transmembrane proteins that contain extracellular kringle, WSC and CUB domains and an intracellular region without any conserved motifs. Kremens bind a subset of the secreted Dickkopf proteins (Dkk 1, 2, and 4) with high affinity to modulate the canonical Wnt signaling pathway that is transduced by the ternary receptor complex composed of Wnt, Frizzled, and the LDL receptor related protein 5/6 (LRP5/6) co-receptor. Recent experiments have shown that KREMEN2 is a regulator of bone remodeling and raise the possibility that antagonizing KREMEN2 might prove beneficial in patients with bone loss disorders.

KREMEN2 Antibody - References

Nakamura T, Aoki S, Kitajima K, et al. Molecular cloning and characterization of Kremen, a novel kringle-containing transmembrane protein. Biochim. Biophys. Acta. 2001; 1518:63-72. Mao B, Wu W, Davidson G, et al. Kremen proteins are Dickkopf receptors that regulate Wnt/beta-catenin signalling. Nature 2002; 417:664-7.

Li J, Liu WM, Cao YJ, et al. Roles of Dickkopf-1 and its receptor KREMEN1 during embryonic implantation in mice. Fertil. Steril. 2008; 90:1470-9.

Schulze J, Seitz S, Saito H, et al. Negative regulation of bone formation by the transmembrane Wnt antagonist Kremen-2. PLoS 2010; 5:e10309.