

Kremen Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP1527a

Specification

Kremen Antibody (N-term) Blocking Peptide - Product Information

Primary Accession O96MU8
Other Accession NP 114434

Kremen Antibody (N-term) Blocking Peptide - 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

The synthetic peptide sequence used to generate the antibody AP1527a was selected from the N-term region of human Kremen. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Kremen Antibody (N-term) Blocking Peptide - 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

Kremen Antibody (N-term) Blocking Peptide - Protocols

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

• Blocking Peptides

Kremen Antibody (N-term) Blocking Peptide - Images

Kremen Antibody (N-term) Blocking Peptide - Background

Kremen is a high-affinity dickkopf homolog 1 (DKK1) transmembrane receptor that functionally cooperates with DKK1 to block wingless (WNT)/beta-catenin signaling. The encoded 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. Alternatively spliced transcript variants encoding distinct isoforms have been observed for this gene.

Kremen Antibody (N-term) Blocking Peptide - References

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