

GREM1 Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP12247b**Specification**

GREM1 Antibody (C-term) Blocking peptide - Product InformationPrimary Accession [O60565](#)**GREM1 Antibody (C-term) Blocking peptide - Additional Information****Gene ID** 26585**Other Names**

Gremlin-1, Cell proliferation-inducing gene 2 protein, Cysteine knot superfamily 1, BMP antagonist 1, DAN domain family member 2, Down-regulated in Mos-transformed cells protein, Increased in high glucose protein 2, IHG-2, GREM1, CKTSF1B1, DAND2, DRM

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.

GREM1 Antibody (C-term) Blocking peptide - Protein Information**Name** GREM1**Synonyms** CKTSF1B1, DAND2, DRM**Function**

Cytokine that may play an important role during carcinogenesis and metanephric kidney organogenesis, as a BMP antagonist required for early limb outgrowth and patterning in maintaining the FGF4-SHH feedback loop. Down-regulates the BMP4 signaling in a dose-dependent manner (By similarity). Antagonist of BMP2; inhibits BMP2-mediated differentiation of osteoblasts (in vitro) (PubMed:27036124). Acts as inhibitor of monocyte chemotaxis. Can inhibit the growth or viability of normal cells but not transformed cells when is overexpressed (By similarity).

Cellular Location

Secreted.

Tissue Location

Highly expressed in small intestine, fetal brain and colon. Expression is restricted to intestinal subepithelial myofibroblasts (ISEMFs) at the crypt base. In subjects with HMPS1, by contrast,

GREM1 is expressed, not only in basal ISEMFs, but also at very high levels in epithelial cells (predominantly colonocytes), with expression extending most of the way up the sides of the crypt. Weakly expressed in brain, ovary, prostate, pancreas and skeletal muscle. In brain found in the region localized around the internal capsule in the large subcortical nuclei, including caudate, putamen, substantia nigra, thalamus and subthalamus. Predominantly expressed in normal cells including neurons, astrocytes and fibroblasts

GREM1 Antibody (C-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

GREM1 Antibody (C-term) Blocking peptide - Images

GREM1 Antibody (C-term) Blocking peptide - Background

This gene encodes a member of the BMP (bone morphogenetic protein) antagonist family. Like BMPs, BMP antagonists contain cystine knots and typically form homo- and heterodimers. The CAN (cerberus and dan) subfamily of BMP antagonists, to which this gene belongs, is characterized by a C-terminal cystine knot with an eight-membered ring. The antagonistic effect of the secreted glycosylated protein encoded by this gene is likely due to its direct binding to BMP proteins. As an antagonist of BMP, this gene may play a role in regulating organogenesis, body patterning, and tissue differentiation. In mouse, this protein has been shown to relay the sonic hedgehog (SHH) signal from the polarizing region to the apical ectodermal ridge during limb bud outgrowth. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.

GREM1 Antibody (C-term) Blocking peptide - References

Kupfer, S.S., et al. Gastroenterology 139(5):1677-1685(2010) Dimitrov, B.I., et al. J. Med. Genet. 47(8):569-574(2010) McKnight, A.J., et al. J. Am. Soc. Nephrol. 21(5):773-781(2010) van Vlodrop, I.J., et al. Am. J. Pathol. 176(2):575-584(2010) Mangold, E., et al. Nat. Genet. 42(1):24-26(2010)