

GREMLIN Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP6133a**Specification**

GREMLIN Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [O70326](#)**GREMLIN Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 23892**Other Names**

Gremlin-1, Cysteine knot superfamily 1, BMP antagonist 1, Down-regulated in Mos-transformed cells protein, Grem1, Cktsf1b1, Drm

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP6133a](/product/products/AP6133a) was selected from the C-term region of human GREMLIN . 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.

GREMLIN Antibody (C-term) Blocking Peptide - Protein Information**Name** Grem1**Synonyms** Cktsf1b1, Drm**Function**

Cytokine that may play an important role during carcinogenesis and metanephric kidney organogenesis, as BMP a antagonist required for early limb outgrowth and patterning in maintaining the FGF4-SHH feedback loop (PubMed: [12808456](http://www.uniprot.org/citations/12808456), PubMed: [15201225](http://www.uniprot.org/citations/15201225)). Down-regulates the BMP4 signaling in a dose-dependent manner (PubMed: [15133038](http://www.uniprot.org/citations/15133038)). Antagonist of BMP2; inhibits BMP2-mediated differentiation of osteoblasts (in vitro) (By similarity). Acts as inhibitor of monocyte chemotaxis (By similarity).

Cellular Location
Secreted.**Tissue Location**

Highly expressed in spleen and to a lesser extent in lung, skeletal muscle and kidney. Expressed only in non-transformed cells or primary fibroblasts in culture but not in established transformed or tumor derived cell lines. Broadly expressed in limb bud mesenchyme but restricted to the distal limb bud mesenchyme and concentrated posteriorly. Expressed in ovary especially in granulosa cells of follicles of type 4.

GREMLIN Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

GREMLIN Antibody (C-term) Blocking Peptide - Images**GREMLIN Antibody (C-term) Blocking Peptide - Background**

Using a *Xenopus* expression-cloning screen, Gremlin was isolated as an antagonist of bone morphogenetic protein (BMP) signaling that is expressed in the neural crest. Gremlin belongs to a novel gene family that includes the head-inducing factor Cerberus and the tumor suppressor DAN. All these family members are secreted proteins that act as BMP antagonists in embryonic explants. The proposed function of Gremlin, Cerberus, and DAN is a BMP signaling blocking activity by binding BMPs, preventing them from interacting with their receptors. Gremlin, Cerberus, and DAN may control diverse processes in growth and development by selectively antagonizing the activities of different subsets of the transforming growth factor (TGF)-beta ligands. By homology searches, Hsu et al. (1998) cloned the human homolog of *Xenopus* Gremlin. The human gremlin cDNA encodes a predicted 184-amino acid protein.

GREMLIN Antibody (C-term) Blocking Peptide - References

Hsu DR, et al. *Molec. Cell* 1998. 1: 673. Khokha MK, et al. *Nature Genet.* 2003. 34: 303. Topol LZ, et al. *Cytogenet. Cell Genet.* 2000. 89: 79. Zuniga A, et al. *Nature* 1999. 401: 598.