

Gremlin Rabbit pAb

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Catalog # AP52044

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	O60565
Reactivity	Rat, Human, Mouse
Predicted	Dog, Rabbit, Chicken, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	20697
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human gremlin
Epitope Specificity	101-184/184
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Secreted.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	In Xenopus, Gremlin 1 belongs to a novel gene family that act as BMP antagonists in embryonic explants. The human homolog of Gremlin 1(CKTFS1B1) is localized on human chromosome 15q13--> q15. Gremlin 1-specific mRNA is expressed in different human tissues, including brain, ovary, intestine and colon. It has been suggested that down-regulation of Gremlin 1 is associated with tumor progression, and support the hypothesis that human Gremlin 1 may play an important role during both neuroembryological development and carcinogenesis.

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
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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

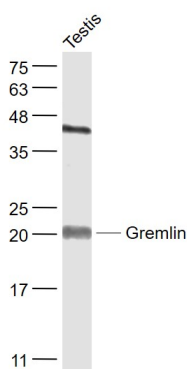
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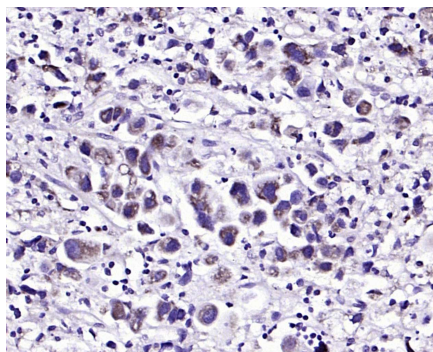
References

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McMahon R.,et al.J. Biol. Chem. 275:9901-9904(2000).
Topol L.Z.,et al.Cytogenet. Cell Genet. 89:79-84(2000).
Tate G.,et al.Submitted (SEP-1999) to the EMBL/GenBank/DDBJ databases.
Kim J.W.,et al.Submitted (FEB-2003) to the EMBL/GenBank/DDBJ databases.

Images



Sample:
Testis (Mouse) Lysate at 40 ug
Primary: Anti- Gremlin (AP52044) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 21 kD
Observed band size: 21 kD



Paraformaldehyde-fixed, paraffin embedded (human gastric carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Incubation with (Gremlin) Polyclonal Antibody, Unconjugated (AP52044) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.