

GREM1

Rabbit Anti-Human Gremlin-1 pAb

Catalog No. CS419A Quantity: 100 µg

CS419B 200 µg

Alternate Names: Cell proliferation-inducing gene 2 protein

Description: Gremlin, also known as "Increased in High Glucose protein 2" (IHG2) and "Down

regulated in Mos-transformed cells protein" (Drm), is a 28 kDa member of the Dan family of secreted glycoproteins. Native human Gremlin consist of 160 amino acids. The mature region contains one potential site for N-linked glycosylation (Asn42), a cysteinerich region, and a cysteine-knot motif (aa 94-184) whose structure is shared by members

of the $\mathsf{TGF}\beta$ superfamily. Human Gremlin exists in both secreted and membrane-associated forms and there exist 2 isoforms. Gremlin functions as a bone morphogenetic protein (BMP) antagonist. It acts by binding to, and forming heterodimers with, BMP2, BMP4, and BMP7, thus preventing them from interacting with their cell surface receptors. This mechanism is thought to be responsible for the pattern-inducing activity of Gremlin during embryonic development and to play a role in human diseases, such as diabetic nephropathy. However, intracellular BMP-independent mechanisms of action may mediate the ability of Gremlin to suppress transformation and tumor genesis under certain experimental conditions. Gremlin also interacts with Slit proteins and acts as an

inhibitor of monocyte chemotaxis. In addition, Gremlin has been found to be a proangiogenic factor expressed by endothelium. Furthermore, Gremlin is a novel agonist

of the major proangiogenic receptor VEGFR2.

Rabbit anti-Human Gremlin-1 polyclonal antibody is produced from the sera of rabbits pre-immunized with highly pure (>95%) recombinant human Gremlin-1 (Lys25-Asp184)

derived from E. coli.

Gene ID: 26585

Protein Accession No.: NP_001178252.1

Host: Rabbit

Immunogen: Recombinant human Gremlin-1

Isotype: IgG

Formulation: Lyophilized from a solution in PBS

Purification: Protein A purified

Reconstitution: Centrifuge vial prior to opening. Reconstitute in sterile water to a concentration of 0.1

Fax: 781-828-0542

-1.0 mg/ml.

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Applications: Western Blot: use at 2-5 μg/ml

The optimal concentration should be determined by the user for each specific application.

Storage & Stability: The lyophilized antibody is stable at room temperature for up to 1 month, but best stored

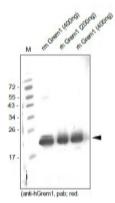
below 4°C. After reconstitution, the antibody is stable for at least two weeks at 2-4°C. Frozen aliquots are stable for at least 6 months when stored at -20°C to -80°C. **Avoid**

repeated freeze-thaw cycles.

Western Analysis of anti-human Gremlin-1.

Samples were loaded in 15% SDS-polyacrylamide gel under reducing conditions.

Lane 1: Molecular Weight markers (kDa). Lane 2: Recombinant Mouse Grem1 (400 ng). Lane 3: Recombinant Human Grem1 (200 ng). Lane 4: Recombinant Human Grem1 (400 ng)



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