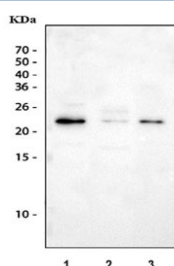


## Gremlin 1 Antibody / GREM1 (R31825)

Catalog No.	Formulation	Size
R31825	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

**Bulk quote request**

<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human, Mouse, Rat
<b>Format</b>	Antigen affinity purified
<b>Clonality</b>	Polyclonal (rabbit origin)
<b>Isotype</b>	Rabbit IgG
<b>Purity</b>	Antigen affinity
<b>Buffer</b>	Lyophilized from 1X PBS with 2% Trehalose
<b>UniProt</b>	O60565
<b>Applications</b>	Western Blot : 0.5-1ug/ml
<b>Limitations</b>	This Gremlin 1 antibody is available for research use only.



Western blot testing of 1) human A549, 2) rat testis and 3) mouse testis tissue lysate with Gremlin 1 antibody. Expected molecular weight 21~23 kDa.

## Description

Gremlin, also known as Drm, is a highly conserved 20.7-kDa, 184 amino acid glycoprotein part of the DAN family and is a cysteine knot-secreted protein. Skeletal cells synthesize bone morphogenetic proteins (BMPs) and BMP antagonists. And Gremlin is expressed in osteoblasts and opposes BMP effects on osteoblastic differentiation and function in vitro. Gremlin 1 (GREM 1) is known for its antagonistic reaction with BMPs in the TGF beta signaling pathway. This gene inhibits BMP-2, BMP-4, and BMP-7. Inhibition by grem 1 of BMPs in mice allow the expression of fibroblast growth factors (FGFs) 4 and 8 and Sonic hedgehog (SHH) which are necessary for proper limb development. Gremlin 1 may play an oncogenic role especially in carcinomas of the uterine cervix, lung, ovary, kidney, breast, colon, pancreas, and sarcoma. Over-expressed gremlin 1 functions by interaction with YWHAH (Its binding site for gremlin 1 was located between residues

61-80 and gremlin 1 binding site for YWHAH was found to be located between residues 1-67). Therefore, Gremlin 1 and its binding protein YWHAH could be good targets for developing diagnostic and therapeutic strategies against human cancers.

## Application Notes

Optimal dilution of the Gremlin 1 antibody should be determined by the researcher.

## Immunogen

Amino acids TMMVTLNCPELQPPTKKKRVTRVKQCRCISIDLD of human Gremlin 1 were used as the immunogen for the Gremlin 1 antibody.

## Storage

After reconstitution, the Gremlin 1 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.