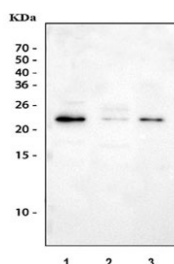


Gremlin 1 Antibody / GREM1 (R31825)

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

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	O60565
Applications	Western Blot : 0.5-1ug/ml
Limitations	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 Dnm, 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 gremlin 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.