Product datasheet Anti-Gremlin/GREM1 Antibody Catalog Number: PB0667

BOSTER BIOLOGICAL TECHNOLOGY Building C21, 3rd to 5th Floors, Optics Valley Biopharmaceutical Accelerator, East Lake High-Tech Development Zone, Wuhan.

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antibody and FLISA

Basic Information	
Product Name	Anti-Gremlin/GREM1 Antibody
Gene Name	GREM1
Source	Rabbit
Clonality	Polyclonal
lsotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Gremlin 1 identical to the related mouse and rat sequences.
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	21 kDa
Dilution Ratios	Western blot (WB):1:500-2000

Storage

12 months from date of receipt, -20°C as supplied.

Background Information

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.

BOSTER® antibody and ELISA experts

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Selected Validation Data



Western blot analysis of Gremlin/GREM1 using anti-Gremlin/GREM1 antibody (PB0667). The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human A549 whole cell lysates, Lane 2: rat testis tissue lysates, Lane 3: mouse testis tissue lysates. After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-Gremlin/GREM1 antigen affinity purified polyclonal antibody (PB0667) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Gremlin/GREM1 at approximately 21 kDa. The expected band size for Gremlin/GREM1 is at 21 kDa.