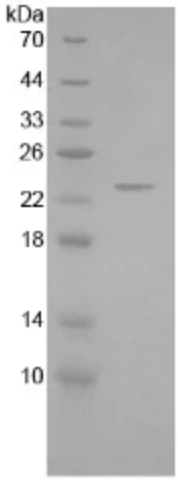
Active Gremlin 1 (GREM1)

Catalog#:PEH12817

概述（Summary）

别称（Alternative Names）	PIG2; CKTSF1B1; DAND2; IHG-2; DAND2; DRM; Increased in high glucose protein 2; Cell proliferation-inducing gene 2 protein; Cysteine knot superfamily 1, BMP antagonist 1
纯度（Purity）	Greater than 97% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Lys26-Asp184】
Accession #	O60565
表达宿主（Host）	E.coli
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	24.9 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	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. Antagonist of BMP2; inhibits BMP2-mediated differentiation of osteoblasts (in vitro). Acts as inhibitor of monocyte chemotaxis. Can inhibit the growth or viability of normal cells but not transformed cells when is overexpressed.

电泳图（SDS-PAGE image）



Greater than 97% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

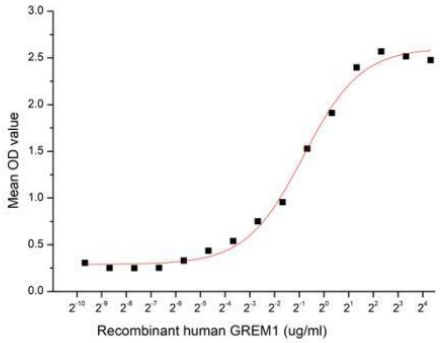


Figure 1. The binding activity of recombinant human GREM1 with recombinant human BMP2

Gremlin 1 (GREM1) is an inhibitor in the TGF-beta signaling pathway. The protein expression is found in many cancers and is thought to play important roles in uterine cervix, lung, ovary, kidney, breast, colon, pancreas, and sarcoma carcinomas. GREM1 and other BMP antagonists are important in the survival of cancer stroma survival and proliferation in some cancers. Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human GREM1 and recombinant human BMP2. Briefly, GREM1 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to BMP2-coated microtiter wells and incubated for 1h at 37 ℃. Wells were washed with PBST and incubated for 1h with anti-GREM1 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50 µL stop solution to the wells and read at 450nm immediately. The binding activity of recombinant human GREM1 and recombinant human BMP2 was shown in Figure 1， the EC50 for this effect is 0.1~0.562 ug/mL.

注意事项（Note）

For Research Use Only , Not for Diagnostic Use.