

gremlin-2 (H-58): sc-135103

BACKGROUND

The gremlin protein family contains antagonists of bone morphogenetic protein (BMP) signaling that are expressed in the neural crest. All family members are secreted proteins that act as BMP antagonists in embryonic explants and are expressed in the proximal airway epithelium of the lung during embryonic development. Gremlin-1 is required for early limb outgrowth and patterning in the FGF4-SHH feedback loop, while gremlin-2 binds and blocks the activity of BMP-2 and BMP-4. The dorsaling factor gremlin belongs to a novel gene family that includes the head-inducing factor Cerberus and the tumor suppressor DAN. Additionally, secreted gremlin relays the sonic hedgehog signal from the polarizing region to the apical ectodermal ridge.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GREM2 (human) mapping to 1q43; Grem2 (mouse) mapping to 1 H3.

SOURCE

gremlin-2 (H-58) is a rabbit polyclonal antibody raised against amino acids 1-58 mapping at the N-terminus of gremlin-2 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

gremlin-2 (H-58) is recommended for detection of gremlin-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

gremlin-2 (H-58) is also recommended for detection of gremlin-2 in additional species, including equine and canine.

Suitable for use as control antibody for gremlin-2 siRNA (h): sc-62425, gremlin-2 siRNA (m): sc-62426, gremlin-2 shRNA Plasmid (h): sc-62425-SH, gremlin-2 shRNA Plasmid (m): sc-62426-SH, gremlin-2 shRNA (h) Lentiviral Particles: sc-62425-V and gremlin-2 shRNA (m) Lentiviral Particles: sc-62426-V.

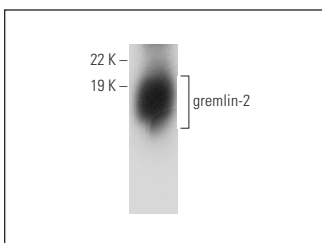
Molecular Weight of gremlin-2: 19 kDa.

Positive Controls: human colon extract: sc-363757.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



gremlin-2 (H-58): sc-135103. Western blot analysis of gremlin-2 expression in human colon tissue extract.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.