

GRINL1A/B (E-16): sc-168037

BACKGROUND

GRINL1A (glutamate receptor-like protein 1A), also known as Gcom2 or Gdown, is a 148 amino acid protein belonging to the GRINL1 family. The gene encoding GRINL1A maps to human chromosome 15q21.3, and exists as two read-through transcript variations. Alternative splicing events additionally result in six isoforms, designated Gdown1, Gdown6, isoform 3, Gdown4, Gdown3 and Gcom1—which exists as a naturally occurring fusion protein with GRINL1A. Isoform 1 localizes to the nucleus and is expressed in adult and fetal brain, as well as heart, kidney, skeletal muscle, small intestine, lung, prostate and testis. A component of the Pol II(G) complex, isoform 1 may also be involved in the mediator complex-dependent regulation of transcription activation. GRINL1B, also known as GCOM2, is a 368 amino acid protein that may be the byproduct of a pseudogene.

REFERENCES

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- Seeger, T.S., et al. 2010. Myozap, a novel intercalated disc protein, activates serum response factor-dependent signaling and is required to maintain cardiac function *in vivo*. *Circ. Res.* 106: 880-890.
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- Huo, L., et al. 2011. Cdc42-dependent formation of the ZO-1/MRCK complex at the leading edge controls cell migration. *EMBO J.* 30: 665-678.
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CHROMOSOMAL LOCATION

Genetic locus: POLR2M (human) mapping to 15q21.3, GCOM2 (human) mapping to 4p16.3; Polr2m (mouse) mapping to 9 D.

SOURCE

GRINL1A/B (E-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of GRINL1A 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.

Blocking peptide available for competition studies, sc-168037 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GRINL1A/B (E-16) is recommended for detection of GRINL1A of mouse, rat, and human origin, and GRINL1B of 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); non cross-reactive with GRINL1A complex locus upstream isoforms, combined isoform Gcom2, and downstream isoforms Gdown3 and Gdown4.

GRINL1A/B (E-16) is also recommended for detection of GRINL1A, Gdown1, Gdown6 and GRINL1B of human origin in additional species, including equine, canine, bovine and porcine.

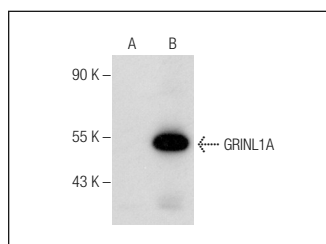
Molecular Weight of GRINL1A/B: 42 kDa.

Positive Controls: GRINL1A (h): 293T Lysate: sc-128737, NIH/3T3 nuclear extract: sc-2138 or mouse hypothalamus extract: sc-364242.

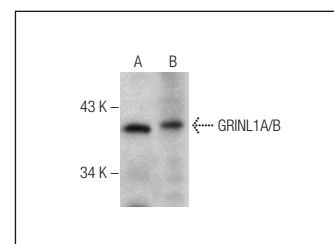
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



GRINL1A/B (E-16): sc-168037. Western blot analysis of GRINL1A expression in non-transfected: sc-117752 (A) and human GRINL1A transfected: sc-128737 (B) 293T whole cell lysates.



GRINL1A/B (E-16): sc-168037. Western blot analysis of GRINL1A/B expression in NIH/3T3 nuclear extract (A) and mouse hypothalamus tissue extract (B).

STORAGE

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

RESEARCH USE

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