

# GRAMD3 (D-12): sc-240535

## BACKGROUND

GRAMD3 (GRAM domain-containing protein 3) is a 432 amino acid protein that contains one GRAM domain and is encoded by a gene that maps to human chromosome 5q23.2. With 181 million base pairs encoding around 1,000 genes, chromosome 5 is about 6% of human genomic DNA. It is associated with Cockayne syndrome through the ERCC8 gene and familial adenomatous polyposis through the adenomatous polyposis coli (APC) tumor suppressor gene. Treacher Collins syndrome is also chromosome 5 associated and is caused by insertions or deletions within the TCOF1 gene. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome. Deletion of 5q or chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

## REFERENCES

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- South, S.T., et al. 2006. A new genomic mechanism leading to cri-du-chat syndrome. *Am. J. Med. Genet. A* 140: 2714-2720.
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- Cleaver, J.E., et al. 2007. Cockayne syndrome exhibits dysregulation of p21 and other gene products that may be independent of transcription-coupled repair. *Neuroscience* 145: 1300-1308.
- Du, H.Y., et al. 2007. Telomerase reverse transcriptase haploinsufficiency and telomere length in individuals with 5p- syndrome. *Aging Cell* 6: 689-697.
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## CHROMOSOMAL LOCATION

Genetic locus: GRAMD3 (human) mapping to 5q23.2; Gramd3 (mouse) mapping to 18 D3.

## SOURCE

GRAMD3 (D-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of GRAMD3 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-240535 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

GRAMD3 (D-12) is recommended for detection of GRAMD3 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); non cross-reactive with other GRAMD family members.

GRAMD3 (D-12) is also recommended for detection of GRAMD3 in additional species, including porcine.

Suitable for use as control antibody for GRAMD3 siRNA (h): sc-91660, GRAMD3 siRNA (m): sc-145753, GRAMD3 shRNA Plasmid (h): sc-91660-SH, GRAMD3 shRNA Plasmid (m): sc-145753-SH, GRAMD3 shRNA (h) Lentiviral Particles: sc-91660-V and GRAMD3 shRNA (m) Lentiviral Particles: sc-145753-V.

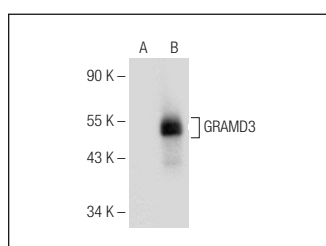
Molecular Weight of GRAMD3: 48 kDa.

Positive Controls: GRAMD3 (h): 293T Lysate: sc-371428 or GRAMD3 (m): 293T Lysate: sc-120621.

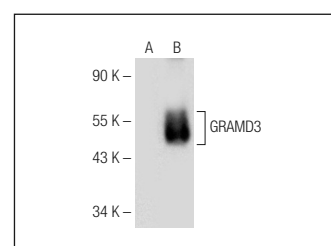
## RECOMMENDED SECONDARY REAGENTS

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



GRAMD3 (D-12): sc-240535. Western blot analysis of GRAMD3 expression in non-transfected: sc-117752 (A) and human GRAMD3 transfected: sc-371428 (B) 293T whole cell lysates.



GRAMD3 (D-12): sc-240535. Western blot analysis of GRAMD3 expression in non-transfected: sc-117752 (A) and mouse GRAMD3 transfected: sc-120621 (B) 293T whole cell lysates.

## 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.