

GRWD1 (Y-19): sc-242972

BACKGROUND

GRWD1 (glutamate-rich WD repeat-containing protein 1), also known as WDR28 or KIAA1942, is a 446 amino acid protein that contains 5 WD repeats. Localizing to the nucleus, GRWD1 is a member of the 50S and 80S preribosomal complexes and may play a role in ribosome biogenesis. The gene encoding GRWD1 maps to human chromosome 19q13.33 and mouse chromosome 7 B4. Consisting of around 63 million bases with over 1,400 genes, human chromosome 19 makes up over 2% of human genomic DNA. Chromosome 19 includes a diversity of interesting genes and is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin superfamily members including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG families, and Fc α receptors. Peutz-Jeghers syndrome, spinocerebellar ataxia type 6, the stroke disorder CADASIL, hypercholesterolemia and Insulin-dependent diabetes have been linked to chromosome 19.

REFERENCES

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3. Trowsdale, J., et al. 2001. The genomic context of natural killer receptor extended gene families. *Immunol. Rev.* 181: 20-38.
4. Le Meur, N., et al. 2004. Complete germline deletion of the STK11 gene in a family with Peutz-Jeghers syndrome. *Eur. J. Hum. Genet.* 12: 415-418.
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CHROMOSOMAL LOCATION

Genetic locus: GRWD1 (human) mapping to 19q13.33; Grwd1 (mouse) mapping to 7 B4.

SOURCE

GRWD1 (Y-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of GRWD1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-242972 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GRWD1 (Y-19) is recommended for detection of GRWD1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

GRWD1 (Y-19) is also recommended for detection of GRWD1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for GRWD1 siRNA (h): sc-97614, GRWD1 siRNA (m): sc-145787, GRWD1 shRNA Plasmid (h): sc-97614-SH, GRWD1 shRNA Plasmid (m): sc-145787-SH, GRWD1 shRNA (h) Lentiviral Particles: sc-97614-V and GRWD1 shRNA (m) Lentiviral Particles: sc-145787-V.

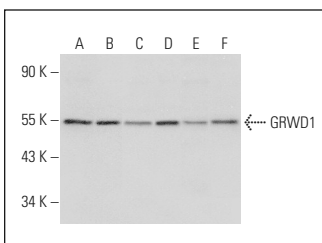
Molecular Weight of GRWD1: 49 kDa.

Positive Controls: A549 cell lysate: sc-2413, HEK293 whole cell lysate: sc-45136 or Jurkat whole cell lysate: sc-2204.

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



GRWD1 (Y-19): sc-242972. Western blot analysis of GRWD1 expression in A549 (A), HEK293 (B), Jurkat (C) and K-562 (D) whole cell lysates and HeLa (E) and NIH/3T3 (F) nuclear extracts.

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.