## BACKGROUND

The RNA methyltransferase family of proteins catalyze the transfer of a methyl group from a donor to an RNA acceptor. Via their ability to modify RNA, RNA methyltransferase proteins play an important role in cell growth and signaling pathways and may be involved in tumor development and progression. The RNA (guanine-9-) methyltransferase domain containing proteins (namely RG9MTD1, RG9MTD2 and RG9MTD3) are probable RNA methyltransferases that may play a role in RNA modification. Due to their involvement in RNArelated pathways, the RG9MTD proteins may be associated with methylation events that lead to carcinogenesis. While both RG9MTD1 and RG9MTD2 exist as one known isoform, RG9MTD3 is expressed as three isoforms produced by alternative splicing events.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: RG9MTD2 (human) mapping to 4q23.

## SOURCE

RG9MTD2 (P-25) is a purified rabbit polyclonal antibody raised against RG9MTD2 of human origin.

## PRODUCT

Each vial contains $100 \mu \mathrm{~g} \operatorname{lgG}$ in 1.0 ml PBS with < $0.1 \%$ sodium azide, $0.1 \%$ gelatin and $<0.02 \%$ sucrose.

## STORAGE

Store at $4^{\circ} \mathrm{C}$, **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.

## APPLICATIONS

RG9MTD2 (P-25) is recommended for detection of RG9MTD2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:1001:1000), immunoprecipitation [1-2 $\mu \mathrm{g}$ per $100-500 \mu \mathrm{~g}$ of total protein ( 1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for RG9MTD2 siRNA (h): sc-89022, RG9MTD2 shRNA Plasmid (h): sc-89022-SH and RG9MTD2 shRNA (h) Lentiviral Particles: sc-89022-V.

Molecular Weight of RG9MTD2: 40 kDa .
Positive Controls: Hep G2 cell lysate: sc-2227.

## 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 antirabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker ${ }^{\text {TM }}$ 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).

DATA


RG9MTD2 (P-25): sc-102082. Western blot analysis of RG9MTD2 expression in Hep G2 whole cell lysate.

## PROTOCOLS

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

