

# PTRH1 (G-12): sc-165311

## BACKGROUND

PTRH1 (probable peptidyl-tRNA hydrolase) is a 214 amino acid protein that belongs to the PTH family. The PTRH1 protein is believed to be involved in RNA splicing, silencing and metabolism. The PTRH1 gene is conserved in chimpanzee, canine, bovine, mouse, rat, zebrafish, *A. thaliana* and rice, and maps to human chromosome 9q34.11. Chromosome 9 consists of about 145 million bases and 4% of the human genome and encodes nearly 900 genes. Considered to play a role in gender determination, deletion of the distal portion of 9p can lead to development of male to female sex reversal, the phenotype of a female with a male X,Y genotype. Hereditary hemorrhagic telangiectasia, which is characterized by harmful vascular defects, is associated with the chromosome 9 gene encoding endoglin protein, ENG. Familial dysautonomia is also associated with chromosome 9 through the gene IKBKAP. Notably, chromosome 9 encompasses the largest interferon family gene cluster. Chromosome 9 is partnered with chromosome 22 in the translocation leading to the aberrant production of BCR-ABL fusion protein often found in leukemias.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: PTRH1 (human) mapping to 9q34.11; Pth1 (mouse) mapping to 2 B.

## SOURCE

PTRH1 (G-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of PTRH1 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-165311 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

PTRH1 (G-12) is recommended for detection of PTRH1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 PTRH2.

Suitable for use as control antibody for PTRH1 siRNA (h): sc-92839, PTRH1 siRNA (m): sc-152589, PTRH1 shRNA Plasmid (h): sc-92839-SH, PTRH1 shRNA Plasmid (m): sc-152589-SH, PTRH1 shRNA (h) Lentiviral Particles: sc-92839-V and PTRH1 shRNA (m) Lentiviral Particles: sc-152589-V.

Molecular Weight of PTRH1: 23 kDa.

## 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) 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.

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.