

# RPTP $\alpha$ (V-19): sc-27602

## BACKGROUND

Receptor protein-tyrosine phosphatase a (RPTP $\alpha$ ) dephosphorylates and activates Src family tyrosine kinases and influences the regulation of integrin signaling, cell adhesion and growth factor responsiveness. RPTP $\alpha$  contains an extracellular domain, a single transmembrane segment and two tandem intracytoplasmic catalytic domains, and constitutively forms dimers in the membrane. The human RPTP $\alpha$  sequence encodes a 793 amino acid protein. Mouse RPTP $\alpha$  precipitated from NIH/3T3 cells is constitutively phosphorylated at Ser180/Ser204. RPTP $\alpha$  also serves as a receptor for *Helicobacter pylori* vacuolating cytotoxin, VacA.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: PTPRA (human) mapping to 20p13; Ptpa (mouse) mapping to 2 F1.

## SOURCE

RPTP $\alpha$  (V-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of RPTP $\alpha$  of human origin.

## STORAGE

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

## PRODUCT

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

Blocking peptide available for competition studies, sc-27602 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

RPTP $\alpha$  (V-19) is recommended for detection of RPTP $\alpha$  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).

RPTP $\alpha$  (V-19) is also recommended for detection of RPTP $\alpha$  in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for RPTP $\alpha$  siRNA (h): sc-44082, RPTP $\alpha$  siRNA (m): sc-153120, RPTP $\alpha$  shRNA Plasmid (h): sc-44082-SH, RPTP $\alpha$  shRNA Plasmid (m): sc-153120-SH, RPTP $\alpha$  shRNA (h) Lentiviral Particles: sc-44082-V and RPTP $\alpha$  shRNA (m) Lentiviral Particles: sc-153120-V.

Molecular Weight of RPTP $\alpha$ : 91 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210.

## 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.

## 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.


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Try **RPTP $\alpha$  (H-4): sc-398203** or **RPTP $\alpha$  (C-8): sc-398243**, our highly recommended monoclonal alternatives to RPTP $\alpha$  (V-19).