

# ROM1 (D-14)-R: sc-162118-R

## BACKGROUND

ROM1 (retinal outer segment membrane protein 1), also known as ROM, RP7, ROСП1 or TSPAN23, is a 351 amino acid integral membrane protein found in the photoreceptor disk rim of the eye. Belonging to the PRPH2/ROM1 family, ROM1 exists as a homodimer but can also form heterodimers with retinal degeneration slow (RDS). ROM1 is essential for disk morphogenesis and may also function as an adhesion molecule involved in the stabilization and compaction of outer segment disks or in the maintenance of the curvature of the rim. Certain defects in the gene encoding ROM1 have been associated with retinitis pigmentosa, a group of genetic eye conditions characterized by the progressive loss of photoreceptor cells that may potentially lead to blindness.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: ROM1 (human) mapping to 11q12.3; Rom1 (mouse) mapping to 19 A.

## STORAGE

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

## SOURCE

ROM1 (D-14)-R is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of ROM1 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-162118 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ROM1 (D-14)-R is recommended for detection of ROM1 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).

Suitable for use as control antibody for ROM1 siRNA (h): sc-96624, ROM1 siRNA (m): sc-153060, ROM1 shRNA Plasmid (h): sc-96624-SH, ROM1 shRNA Plasmid (m): sc-153060-SH, ROM1 shRNA (h) Lentiviral Particles: sc-96624-V and ROM1 shRNA (m) Lentiviral Particles: sc-153060-V.

Molecular Weight of ROM1: 37 kDa.

## 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 anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.