

# PHR1 (K-16): sc-50661

## BACKGROUND

Pleckstrin homology domain retinal protein 1 (PHR1), also designated Pleckstrin homology domain-containing family B member 1, is a membrane protein that contains a Pleckstrin homology (PH) domain at its N-terminus and a 27 amino acid transmembrane segment at its C-terminus, along with several casein kinase II phosphorylation sites and a putative protein kinase C (PKC) phosphorylation site. The full-length mouse and human PHR1 proteins contain 243 amino acid residues and share 94% sequence identity. The presence of two transcription start sites and alternative splicing results in four PHR1 isoforms in both humans and mice. All PHR1 isoforms bind to transducin  $\beta$  subunits, the binding of which is dependent upon the N-terminal 137 residues of full-length PHR1. This suggests that the PH domain (amino acids 21 to 128), which is present in all PHR1 isoforms, mediates binding. PHR1 shows pre-dominant expression in the outer segments of photoreceptor cells, both in rods and cones, as well as in retina and brain tissues.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: PLEKHB1 (human) mapping to 11q13.4; Plekhh1 (mouse) mapping to 7 E3.

## SOURCE

PHR1 (K-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PHR1 of human origin.

## 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-50661 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

PHR1 (K-16) is recommended for detection of PHR1 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).

PHR1 (K-16) is also recommended for detection of PHR1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for PHR1 siRNA (h): sc-61336, PHR1 siRNA (m): sc-61337, PHR1 shRNA Plasmid (h): sc-61336-SH, PHR1 shRNA Plasmid (m): sc-61337-SH, PHR1 shRNA (h) Lentiviral Particles: sc-61336-V and PHR1 shRNA (m) Lentiviral Particles: sc-61337-V.

Molecular Weight of PHR1: 27 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.