

# MFRP (C-18): sc-54098

## BACKGROUND

MFRP (membrane frizzled-related protein) is a single pass type II membrane protein with two cubilin (CUB) domains, two LDL-receptor class A domains, a cysteine-rich domain (CRD) and seven N-glycosylation sites. The C-terminal CRD is related to the Wnt-binding domain of the frizzled family of transmembrane proteins, suggesting that MFRP may act as a Wnt receptor. MFRP is predominantly expressed in retinal pigment epithelial cells, co-localizing to the plasma membrane with CTRP5. MFRP interacts with CTRP5 via its CUB domain and may play a role in the development of the eye. Functional MFRP is necessary for photoreceptor maintenance and appears to regulate the axial length of the eye. Mutations in the gene encoding MFRP can affect various structures in the eye and may result in nanophthalmos 2 (NNO2), an eye disorder characterized by extreme hyperopia.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: MFRP (human) mapping to 11q23.3; Mfrp (mouse) mapping to 9 A5.1.

## SOURCE

MFRP (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of MFRP 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-54098 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

MFRP (C-18) is recommended for detection of MFRP of human, mouse and, to a lesser extent, rat 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).

MFRP (C-18) is also recommended for detection of MFRP in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for MFRP siRNA (h): sc-72373, MFRP siRNA (m): sc-77398, MFRP shRNA Plasmid (h): sc-72373-SH, MFRP shRNA Plasmid (m): sc-77398-SH, MFRP shRNA (h) Lentiviral Particles: sc-72373-V and MFRP shRNA (m) Lentiviral Particles: sc-77398-V.

Molecular Weight of MFRP: 62 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.