

# MREG (FL-214): sc-135308

## BACKGROUND

The photoreceptor rod cell that is responsible for vision under conditions of low light consists of stacked arrays of disk membranes that make up its outer segment portion. Regulated by complex biochemical mechanisms, the rod outer segment is under constant renewal as new disks form at the base. MREG (melanoregulin), also known as DSU (dilute suppressor protein homolog) or WDT2, is thought to play a role in membrane fusion and in regulating the biogenesis of disk membranes of photoreceptor rods. MREG interacts with RDS (also known as peripherin-2), a photoreceptor-specific tetraspanin protein that is required to maintain normal cell structure during the renewal process of membrane fusion. MREG is 214 amino acids in length, is expressed in photoreceptor cells and is expressed as 2 isoforms due to alternative splicing.

## REFERENCES

1. Roof, D.J., et al. 1982. Surfaces of rod photoreceptor disk membranes: light-activated enzymes. *J. Cell Biol.* 95: 501-509.
2. Boesze-Battaglia, K., et al. 1996. Differential membrane protein phosphorylation in bovine retinal rod outer segment disk membranes as a function of disk age. *Biosci. Rep.* 16: 289-297.

## CHROMOSOMAL LOCATION

Genetic locus: MREG (human) mapping to 2q35; Mreg (mouse) mapping to 1 C3.

## SOURCE

MREG (FL-214) is a rabbit polyclonal antibody raised against amino acids 1-214 representing full length MREG 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.

## APPLICATIONS

MREG (FL-214) is recommended for detection of MREG 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).

MREG (FL-214) is also recommended for detection of MREG in additional species, including bovine and porcine.

Suitable for use as control antibody for MREG siRNA (h): sc-94777, MREG siRNA (m): sc-149550, MREG shRNA Plasmid (h): sc-94777-SH, MREG shRNA Plasmid (m): sc-149550-SH, MREG shRNA (h) Lentiviral Particles: sc-94777-V and MREG shRNA (m) Lentiviral Particles: sc-149550-V.

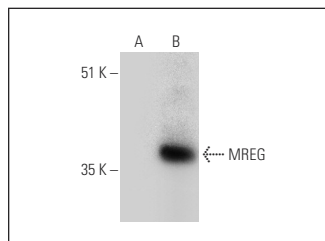
Molecular Weight of MREG: 28 kDa.

Positive Controls: MREG (h): 293T Lysate: sc-111448, MCF7 whole cell lysate: sc-2206 or Jurkat whole cell lysate: sc-2204.

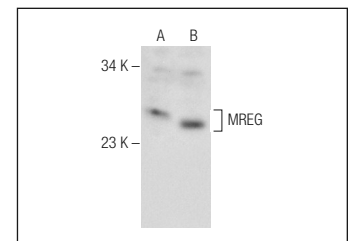
## RECOMMENDED SECONDARY REAGENTS

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.

## DATA



MREG (FL-214): sc-135308. Western blot analysis of MREG expression in non-transfected: sc-117752 (A) and human MREG transfected: sc-111448 (B) 293T whole cell lysates.



MREG (FL-214): sc-135308. Western blot analysis of MREG expression in Jurkat (A) and MCF7 (B) whole cell lysates.

## 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.

**MONOS**  
Satisfaction  
Guaranteed

Try **MREG (F-3): sc-374216** or **MREG (A-6): sc-374144**, our highly recommended monoclonal alternatives to MREG (FL-214).