

PMR1 (H-200): sc-5548

BACKGROUND

The *Saccharomyces cerevisiae* protein, PMR1, encodes P-type calcium transport ATPase, which localizes to the Golgi and regulates the intracellular transport of calcium and manganese. The human homologue, ATP2C1 (also designated sPLA in rat), also regulates the transport of calcium in the Golgi complex and is related to other P-type ATPases family members, such as the sarco/endoplasmic calcium ATPase (SERCA) and the plasma membrane calcium ATPase (PCMA). PMR1 is a transmembrane protein that exists as 2 splice variants, which vary by 20 amino acids. PMR1 is mutated in Hailey-Hailey disease (HHD), which is an autosomal dominant disorder that is characterized by blisters and erosions of the skin. These findings provide further evidence that PMR1 plays a key role in maintaining the integrity of the epidermis by controlling intracellular calcium signaling.

CHROMOSOMAL LOCATION

Genetic locus: ATP2C1 (human) mapping to 3q22.1; Atp2c1 (mouse) mapping to 9 F1.

SOURCE

PMR1 (H-200) is a rabbit polyclonal antibody raised against amino acids 720-919 mapping epitope corresponding to amino acids 720-919 of PMR1 of human origin of PMR1 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

PMR1 (H-200) is recommended for detection of PMR1 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

PMR1 (H-200) is also recommended for detection of PMR1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for PMR1 siRNA (h): sc-36285, PMR1 siRNA (m): sc-36286, PMR1 shRNA Plasmid (h): sc-36285-SH, PMR1 shRNA Plasmid (m): sc-36286-SH, PMR1 shRNA (h) Lentiviral Particles: sc-36285-V and PMR1 shRNA (m) Lentiviral Particles: sc-36286-V.

Molecular Weight of PMR1: 104 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, A-431 whole cell lysate: sc-2201 or MDCK cell lysate: sc-2252.

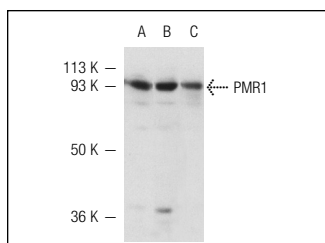
STORAGE

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

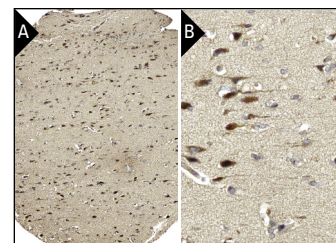
RESEARCH USE

For research use only, not for use in diagnostic procedures.

DATA



PMR1 (H-200): sc-5548. Western blot analysis of PMR1 expression in HeLa (A), A-431 (B) and MDCK (C) whole cell lysates.



PMR1 (H-200): sc-5548. Immunoperoxidase staining of formalin fixed, paraffin-embedded human cerebral cortex tissue showing cytoplasmic staining of neuronal cells at low (A) and high (B) magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

SELECT PRODUCT CITATIONS

- Foddiss, R., et al. 2002. SV40 infection induces telomerase activity in human mesothelial cells. *Oncogene* 21: 1434-1442.
- Brachner, A., et al. 2006. Telomerase- and alternative telomere lengthening-independent telomere stabilization in a metastasis-derived human non-small cell lung cancer cell line: effect of ectopic hTERT. *Cancer Res.* 66: 3584-3592.
- McNamara, S., et al. 2008. Topoisomerase IIbeta negatively modulates retinoic acid receptor alpha function: a novel mechanism of retinoic acid resistance. *Mol. Cell. Biol.* 28: 2066-2077.
- Nayak, A., et al. 2009. Sumoylation of the transcription factor NFATc1 leads to its subnuclear relocalization and interleukin-2 repression by histone deacetylase. *J. Biol. Chem.* 284: 10935-10946.
- Fan, Q., et al. 2009. A role for monoubiquitinated FANCD2 at telomeres in ALT cells. *Nucleic Acids Res.* 37: 1740-1754.
- Jiang, W.Q., et al. 2009. Induction of alternative lengthening of telomeres-associated PML bodies by p53/p21 requires HP1 proteins. *J. Cell Biol.* 185: 797-810.
- Pennella, M.A., et al. 2010. Adenovirus E1B 55-kilodalton protein is a p53-SUMO1 E3 ligase that represses p53 and stimulates its nuclear export through interactions with promyelocytic leukemia nuclear bodies. *J. Virol.* 84: 12210-12225.
- Mohni, K.N., et al. 2013. Efficient herpes simplex virus 1 replication requires cellular ATR pathway proteins. *J. Virol.* 87: 531-542.

MONOS
Satisfaction
Guaranteed

Try **PMR1 (G-9): sc-365375**, our highly recommended monoclonal alternative to PMR1 (H-200).