

# mucolin 3 (Y-13): sc-103641

## BACKGROUND

The mucolipins are a family of cation channel proteins designated mucolin 1, mucolin 2 and mucolin 3. Mucolipins are predominantly expressed within the endocytic pathway and may regulate membrane traffic and/or degradation. Mucolin 3, also known as TRPML3, TRP-ML3 or MCOLN3, is a 553 amino acid multi-pass membrane protein that belongs to the Polycystin family of transient receptors and localizes to lysosomes. Also expressed in hair cells, mucolin 3 may play a critical role at the ankle-link region during hair-bundle growth. Mutations in mucolin 3 have been linked to hair cell degeneration leading to hearing loss and balance disorders. Defects in mucolin 3 may be associated with mucolipidosis type IV, an autosomal recessive lysosomal storage disorder that causes severe neurodegeneration, achlorhydria and visual impairments. Two isoforms exist due to alternative splicing events.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: MCOLN3 (human) mapping to 1p22.3; Mcoln3 (mouse) mapping to 3 H2.

## SOURCE

mucolin 3 (Y-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of mucolin 3 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-103641 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

mucolin 3 (Y-13) is recommended for detection of mucolin 3 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); non cross-reactive with mucolin 1 or mucolin 2.

Suitable for use as control antibody for mucolin 3 siRNA (h): sc-106264, mucolin 3 siRNA (m): sc-106265, mucolin 3 shRNA Plasmid (h): sc-106264-SH, mucolin 3 shRNA Plasmid (m): sc-106265-SH, mucolin 3 shRNA (h) Lentiviral Particles: sc-106264-V and mucolin 3 shRNA (m) Lentiviral Particles: sc-106265-V.

Molecular Weight of mucolin 3: 68 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.