

# ZDHHC15 (E-13): sc-169847

## BACKGROUND

Zinc-finger proteins contain DNA-binding domains and have a wide variety of functions, most of which encompass some form of transcriptional activation or repression. ZDHHC15 (zinc finger, DHHC-type containing 15), also known as MRX91, is a 337 amino acid multi-pass membrane protein that contains one DHHC-type zinc finger. Expressed in kidney, placenta, brain, heart, liver and lung, ZDHHC15 functions as a palmitoyltransferase that, via its DHHC domain, catalyzes the conversion of palmitoyl-CoA and a protein-cysteine to S-palmitoyl protein and CoA. Defects in the gene encoding ZDHHC15 are the cause of mental retardation X-linked type 91, a form of mental retardation that is characterized by impairments in adapted behavior that manifest during development. Multiple isoforms of ZDHHC15 exist due to alternative splicing events.

## REFERENCES

1. Putilina, T., et al. 1999. The DHHC domain: a new highly conserved cysteine-rich motif. *Mol. Cell. Biochem.* 195: 219-226.
2. Linder, M.E., et al. 2004. Model organisms lead the way to protein palmitoyltransferases. *J. Cell Sci.* 117: 521-526.
3. Mansouri, M.R., et al. 2005. Loss of ZDHHC15 expression in a woman with a balanced translocation t(X;15)(q13.3;cen) and severe mental retardation. *Eur. J. Hum. Genet.* 13: 970-977.
4. Mitchell, D.A., et al. 2006. Protein palmitoylation by a family of DHHC protein S-acyltransferases. *J. Lipid Res.* 47: 1118-1127.
5. Online Mendelian Inheritance in Man, OMIM™. 2006. Johns Hopkins University, Baltimore, MD. MIM Number: 300576. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

## CHROMOSOMAL LOCATION

Genetic locus: ZDHHC15 (human) mapping to Xq13.3; Zdhhc15 (mouse) mapping to X D.

## SOURCE

ZDHHC15 (E-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZDHHC15 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-169847 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

## APPLICATIONS

ZDHHC15 (E-13) is recommended for detection of ZDHHC15 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 other ZDHHC family members.

ZDHHC15 (E-13) is also recommended for detection of ZDHHC15 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ZDHHC15 siRNA (h): sc-91146, ZDHHC15 siRNA (m): sc-155493, ZDHHC15 shRNA Plasmid (h): sc-91146-SH, ZDHHC15 shRNA Plasmid (m): sc-155493-SH, ZDHHC15 shRNA (h) Lentiviral Particles: sc-91146-V and ZDHHC15 shRNA (m) Lentiviral Particles: sc-155493-V.

Molecular Weight of ZDHHC15: 39 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.

## RESEARCH USE

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