# SANTA CRUZ BIOTECHNOLOGY, INC.

# MISR II (H-150): sc-67287



# BACKGROUND

MISR II (anti-Muellerian hormone type-2 receptor, MIS type II receptor) is a 573 amino acid protein encoded by the human gene AMHR2. MISR II belongs to the protein kinase superfamily, TKL Ser/Thr protein kinase family, TGFB receptor subfamily and contains one protein kinase domain. Upon ligand binding, MISR II forms a receptor complex consisting of two type II and two type I transmembrane serine/threonine kinases. These type II receptors phosphorylate and activate type I receptors which autophosphorylate, then bind and activate Smad transcriptional regulators. MISR II also acts as a receptor for anti-Muellerian hormone. Defects in AMHR2 are the cause of persistent Muellerian duct syndrome type 2 (PMDS-2). PMDS-2 is a form of male pseudohermaphroditism characterized by a failure of Muellerian duct regression in otherwise normal males.

# REFERENCES

- 1. Armendares, S., et al. 1974. Two male sibs with uterus and fallopian tubes. A rare, probably inherited disorder. Clin. Genet. 4: 291-296.
- Imbeaud, S., et al. 1996. Insensitivity to anti-Mullerian hormone due to a mutation in the human anti-Mullerian hormone receptor. Nat. Genet. 11: 382-388.

#### CHROMOSOMAL LOCATION

Genetic locus: AMHR2 (human) mapping to 12q13.13; Amhr2 (mouse) mapping to 15 F3.

#### SOURCE

MISR II (H-150) is a rabbit polyclonal antibody raised against amino acids 1-150 mapping within an N-terminal extracellular domain of MISR II of human origin.

#### PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## **APPLICATIONS**

MISR II (H-150) is recommended for detection of MISR II of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

Suitable for use as control antibody for MISR II siRNA (h): sc-62621, MISR II siRNA (m): sc-62622, MISR II shRNA Plasmid (h): sc-62621-SH, MISR II shRNA Plasmid (m): sc-62622-SH, MISR II shRNA (h) Lentiviral Particles: sc-62621-V and MISR II shRNA (m) Lentiviral Particles: sc-62622-V.

Molecular Weight of MISR II: 63 kDa.

Positive Controls: rat testis extract: sc-2400, rat ovary extract: sc-2399 or ES-2 cell lysate: sc-24674.

#### **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<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

#### DATA





MISR II (H-150): sc-67287. Western blot analysis of MISR II expression in ES-2 whole cell lysate.

MISR II (H-150): sc-67287. Western blot analysis of MISR II expression in rat testis (**A**) and rat ovary (**B**) tissue extracts.

### SELECT PRODUCT CITATIONS

- Nanjappa, M.K., et al. 2012. The industrial chemical bisphenol A (BPA) interferes with proliferative activity and development of steroidogenic capacity in rat Leydig cells. Biol. Reprod. 86: 135, 1-12.
- Chilvers, R.A., et al. 2012. Development of a novel protocol for isolation and purification of human granulosa cells. J. Assist. Reprod. Genet. 29: 547-556.

### **STORAGE**

Store at 4° C, \*\*D0 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 or our catalog for detailed protocols and support products.

MONOS Satisfation Guaranteed

Try **MISR II (D-9): sc-377413**, our highly recommended monoclonal alternative to MISR II (H-150).