

MISR II (h): 293T Lysate: sc-372823

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, TGF β 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 Mullerian duct syndrome type 2 (PMDS-2). PMDS-2 is a form of male pseudohermaphroditism characterized by a failure of Mullerian duct regression in otherwise normal males.

REFERENCES

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2. Imbeaud, S., et al. 1995. Insensitivity to anti-Müllerian hormone due to a mutation in the human anti-Müllerian hormone receptor. Nat. Genet. 11: 382-388.
3. Mishina, Y., et al. 1996. Genetic analysis of the Müllerian-inhibiting substance signal transduction pathway in mammalian sexual differentiation. Genes Dev. 10: 2577-2587.
4. Imbeaud, S., et al. 1996. A 27 base-pair deletion of the anti-Müllerian type II receptor gene is the most common cause of the persistent Müllerian duct syndrome. Hum. Mol. Genet. 5: 1269-1277.
5. Kunieda, T., et al. 1998. The gene encoding anti-Mullerian hormone type 2 receptor maps to mouse chromosome 15. Mamm. Genome 9: 259.
6. Messika-Zeitoun, L., et al. 2001. Autosomal recessive segregation of a truncating mutation of anti-Mullerian type II receptor in a family affected by the persistent Mullerian duct syndrome contrasts with its dominant negative activity *in vitro*. J. Clin. Endocrinol. Metab. 86: 4390-4397.

CHROMOSOMAL LOCATION

Genetic locus: AMHR2 (human) mapping to 12q13.13.

PRODUCT

MISR II (h): 293T Lysate represents a lysate of human MISR II transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

MISR II (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive MISR II antibodies. Recommended use: 10-20 μ l per lane.

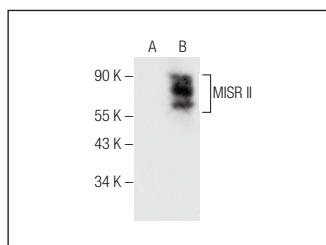
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

MISR II (D-9): sc-377413 is recommended as a positive control antibody for Western Blot analysis of enhanced human MISR II expression in MISR II transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



MISR II (D-9): sc-377413. Western blot analysis of MISR II expression in non-transfected: sc-117752 (A) and human MISR II transfected: sc-372823 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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 for detailed protocols and support products.