

ITM2A (H-136): sc-134811

BACKGROUND

The type II integral membrane (ITM2) protein family consists of three members ITM2A (also designated E25), ITM2B and ITM2C. ITM2A expression is high in osteogenic and lymphoid tissues, while both ITM2B and ITM2C are expressed in brain. Mutations in the ITM2B gene can lead to familial British dementia (fbd), and autosomal dominant disease characterized by progressive dementia, spasticity, and cerebellar ataxia, or familial Danish dementia (fdd), an autosomal dominant disorder characterized by cataracts, deafness, progressive ataxia, and dementia. The ITM2A 263-amino acid protein contains an N-terminal cytosolic domain, an uncleaved signal anchor sequence, and a tyrosine-rich C-terminal domain. Human ITM2A shares 91% homology with mouse ITM2A.

REFERENCES

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- Van den Plas, D., et al. 2004. Constitutive overexpression of the integral membrane protein Itm2A enhances myogenic differentiation of C2C12 cells. *Cell Biol. Int.* 28: 199-207.
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CHROMOSOMAL LOCATION

Genetic locus: ITM2A (human) mapping to Xq21.1; Itm2a (mouse) mapping to X D.

SOURCE

ITM2A (H-136) is a rabbit polyclonal antibody raised against amino acids 1-136 mapping at the N-terminus of ITM2A 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

ITM2A (H-136) is recommended for detection of ITM2A 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ITM2A (H-136) is also recommended for detection of ITM2A in additional species, including equine.

Suitable for use as control antibody for ITM2A siRNA (h): sc-60867, ITM2A siRNA (m): sc-60868, ITM2A shRNA Plasmid (h): sc-60867-SH, ITM2A shRNA Plasmid (m): sc-60868-SH, ITM2A shRNA (h) Lentiviral Particles: sc-60867-V and ITM2A shRNA (m) Lentiviral Particles: sc-60868-V.

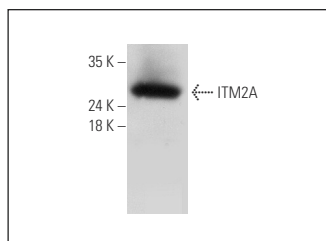
Molecular Weight of ITM2A: 30 kDa.

Positive Controls: human skeletal muscle extract: sc-363776.

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™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) 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™ Mounting Medium: sc-24941.

DATA



ITM2A (H-136): sc-134811. Western blot analysis of ITM2A expression in human skeletal muscle tissue extract.

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.