

MIA3 (P-15): sc-161854

BACKGROUND

MIA3 (melanoma inhibitory activity family, member 3), also known as ARNT or TANGO, is a 1,907 amino acid single-pass type I membrane protein that localizes to the endoplasmic reticulum (ER) and contains one SH3 domain. Expressed in a wide variety of tissues with the exception of bone marrow and peripheral blood mononuclear cells, MIA3 is required for COL7A1 secretion and cargo loading at ER exit sites and may also regulate the release of other proteins from the ER. Multiple isoforms of MIA3 exist due to alternative splicing events. The gene encoding MIA3 maps to human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome. Aberrations in chromosome 1 are found in a variety of cancers, including head and neck cancer, malignant melanoma and multiple myeloma.

REFERENCES

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2. Bosserhoff, A.K., et al. 2004. Characterization and expression pattern of the novel MIA homolog TANGO. *Gene Expr. Patterns* 4: 473-479.
3. Arndt, S. and Bosserhoff, A.K. 2006. TANGO is a tumor suppressor of malignant melanoma. *Int. J. Cancer* 119: 2812-2820.
4. Arndt, S., et al. 2007. Interactions of TANGO and leukocyte integrin CD11c/CD18 regulate the migration of human monocytes. *J. Leukoc. Biol.* 82: 1466-1472.
5. Arndt, S. and Bosserhoff, A.K. 2007. Reduced expression of TANGO in colon and hepatocellular carcinomas. *Oncol. Rep.* 18: 885-891.
6. Saito, K., Chen, M., Bard, F., Chen, S., Zhou, H., Woodley, D., Polischuk, R., Schekman, R. and Malhotra, V. 2009. TANGO1 facilitates cargo loading at endoplasmic reticulum exit sites. *Cell* 136: 891-902.

CHROMOSOMAL LOCATION

Genetic locus: MIA3 (human) mapping to 1q41; Mia3 (mouse) mapping to 1.

SOURCE

MIA3 (P-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of MIA3 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-161854 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MIA3 (P-15) is recommended for detection of MIA3 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 MIA or MIA2.

MIA3 (P-15) is also recommended for detection of MIA3 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for MIA3 siRNA (h): sc-78818, MIA3 shRNA Plasmid (h): sc-78818-SH and MIA3 shRNA (h) Lentiviral Particles: sc-78818-V.

Molecular Weight of MIA3: 214 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 or our catalog for detailed protocols and support products.


 MONOS
 Satisfaction
 Guaranteed

Try **MIA3 (C-5): sc-393916**, our highly recommended monoclonal alternative to MIA3 (P-15).