

Mystique (S-19): sc-79990

BACKGROUND

Mystique, also known as PDLIM2 (PDZ and LIM domain protein 2), PP6345 or SLIM, is a 352 amino acid protein that contains one LIM zinc-binding domain and one PDZ domain. Expressed as four isoforms that localize to either the cytoplasm/cytoskeleton or to the nucleus, Mystique is thought to function as an adapter protein that promotes cell attachment at the Actin cytoskeleton. Mystique interacts with α -actinin-1 and α -actinin-4 and, in addition to its role in cell-cell interactions, is necessary for the proper migration of epithelial cells. Overexpression of Mystique suppresses anchorage-independent growth and enhances cell adhesion to Fibronectin and collagen (COL), an event that may facilitate the migratory capabilities of certain tumors. Due to its ability to enhance tumor migration, Mystique is thought to play a role in the progression of breast cancer and other malignant carcinomas.

REFERENCES

1. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 609722. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
2. Shin, B.K., et al. 2003. Global profiling of the cell surface proteome of cancer cells uncovers an abundance of proteins with chaperone function. *J. Biol. Chem.* 278: 7607-7616.
3. Torrado, M., et al. 2004. PDLIM2, a novel PDZ-LIM domain protein, interacts with α -actinins and filamin A. *Invest. Ophthalmol. Vis. Sci.* 45: 3955-3963.
4. Wan, D., et al. 2004. Large-scale cDNA transfection screening for genes related to cancer development and progression. *Proc. Natl. Acad. Sci. USA* 101: 15724-15729.
5. Tanaka, T., et al. 2005. SLIM is a nuclear ubiquitin E3 ligase that negatively regulates Stat signaling. *Immunity* 22: 729-736.
6. Loughran, G., et al. 2005. Mystique is a new Insulin-like growth factor-I-regulated PDZ-LIM domain protein that promotes cell attachment and migration and suppresses Anchorage-independent growth. *Mol. Biol. Cell* 16: 1811-1822.
7. Tanaka, T., et al. 2007. PDLIM2-mediated termination of transcription factor NF κ B activation by intranuclear sequestration and degradation of the p65 subunit. *Nat. Immunol.* 8: 584-591.

CHROMOSOMAL LOCATION

Genetic locus: PDLIM2 (human) mapping to 8p21.3; Pdlim2 (mouse) mapping to 14 D2.

SOURCE

Mystique (S-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Mystique of human origin.

STORAGE

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

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-79990 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Mystique (S-19) is recommended for detection of Mystique 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).

Mystique (S-19) is also recommended for detection of Mystique in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Mystique siRNA (h): sc-75856, Mystique siRNA (m): sc-75857, Mystique shRNA Plasmid (h): sc-75856-SH, Mystique shRNA Plasmid (m): sc-75857-SH, Mystique shRNA (h) Lentiviral Particles: sc-75856-V and Mystique shRNA (m) Lentiviral Particles: sc-75857-V.

Molecular Weight of Mystique: 38 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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



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Try **Mystique (B-8): sc-515630**, our highly recommended monoclonal alternative to Mystique (S-19).