

HOM-TES-103 (G-15): sc-168101

BACKGROUND

Intermediate filaments are composed of two-chain, α -helical, coiled-coil molecules arranged on an imperfect helical lattice. They have been widely used as markers for distinguishing individual cell types within a tissue and identifying the origins of metastatic tumors. Vimentin is a general marker of cells originating in the mesenchyme and is frequently co-expressed with other members of the intermediate filament family, such as the cytokeratins, in certain neoplasms. Vimentin and Desmin, a related class III intermediate filament, are both expressed during skeletal muscle development. Desmuslin links Desmin to the extracellular matrix and provides structural support in muscle. HOM-TES-103, also known as intermediate filament family orphan 1 (IFFO1), is a 559 amino acid protein that belongs to the intermediate filament family. Ubiquitously expressed, HOM-TES-103 exists as seven alternatively spliced isoforms.

REFERENCES

1. Türeci, O., et al. 2002. A novel tumour associated leucine zipper protein targeting to sites of gene transcription and splicing. *Oncogene* 21: 3879-3888.
2. Rual, J.F., et al. 2005. Towards a proteome-scale map of the human protein-protein interaction network. *Nature* 437: 1173-1178.
3. Lim, J., et al. 2006. A protein-protein interaction network for human inherited ataxias and disorders of Purkinje cell degeneration. *Cell* 125: 801-814.
4. Upadhyay, R., et al. 2011. Altered phosphorylation and distribution status of vimentin in rat seminiferous epithelium following 17 β -estradiol treatment. *Histochem. Cell Biol.* 136: 543-555.
5. Windoffer, R., et al. 2011. Cytoskeleton in motion: the dynamics of keratin intermediate filaments in epithelia. *J. Cell Biol.* 194: 669-678.

CHROMOSOMAL LOCATION

Genetic locus: IFFO1 (human) mapping to 12p13.31; Iffo1 (mouse) mapping to 6 F3.

SOURCE

HOM-TES-103 (G-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HOM-TES-103 of human origin.

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-168101 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

HOM-TES-103 (G-15) is recommended for detection of HOM-TES-103 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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).

HOM-TES-103 (G-15) is also recommended for detection of HOM-TES-103 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for HOM-TES-103 siRNA (h): sc-96206, HOM-TES-103 siRNA (m): sc-146068, HOM-TES-103 shRNA Plasmid (h): sc-96206-SH, HOM-TES-103 shRNA Plasmid (m): sc-146068-SH, HOM-TES-103 shRNA (h) Lentiviral Particles: sc-96206-V and HOM-TES-103 shRNA (m) Lentiviral Particles: sc-146068-V.

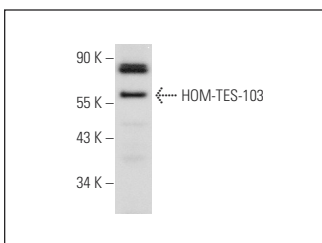
Molecular Weight of HOM-TES-103: 62 kDa.

Positive Controls: Human brain hippocampus extract: sc-364375.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



HOM-TES-103 (G-15): sc-168101. Western blot analysis of HOM-TES-103 expression in human brain tissue extract.

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.