SANTA CRUZ BIOTECHNOLOGY, INC.

MESP1 (T-15): sc-163078

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The Power to Question

BACKGROUND

MESP1 (mesoderm posterior 1 homolog), also known as bHLHc5, is a 268 amino acid protein that contains one basic helix-loop-helix (bHLH) domain, a motif that mediates protein dimerization and can bind to the E-box sequence of DNA. Localized to the nucleus, MESP1 functions as a transcription factor that, via its bHLH domain, participates in the epithelialization and the development of the cardiac and somitic mesoderm. MESP1 is highly expressed during gastrulation and somitogenesis and is necessary for the formation of single heart tubes during cardiac maturation. Early detection of MESP1 may be an indicator of the formation of cardiac precursor cells in developing embryos. Additionally, MESP1 plays a role in the rostrocaudal patterning of the somites, an event that influences select Notch signaling pathways.

REFERENCES

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RESEARCH USE

For research use only, not for use in diagnostic procedures.

CHROMOSOMAL LOCATION

Genetic locus: Mesp1 (mouse) mapping to 7 D3.

SOURCE

MESP1 (T-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of MESP1 of mouse 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-163078 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MESP1 (T-15) is recommended for detection of MESP1 of mouse and rat 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 MESP2.

Suitable for use as control antibody for MESP1 siRNA (m): sc-149373, MESP1 shRNA Plasmid (m): sc-149373-SH and MESP1 shRNA (m) Lentiviral Particles: sc-149373-V.

Molecular Weight of MESP1: 29 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.

PROTOCOLS

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