# MESDC2 (D-19): sc-139397



The Power to Question

#### **BACKGROUND**

MESDC2 (mesoderm development candidate 2), also known as BOCA or MESD, is a 234 amino acid endoplasmic reticulum protein belonging to the MESD family. Considered a chaperone protein, MESDC2 specifically assists in folding  $\beta$ -propeller/EGF modules within the family of low-density lipoprotein receptors (LDLRs) through N- and C-terminal unstructured regions. MESDC2 modulates the Wnt pathway by chaperoning coreceptors LRP5 and LRP6 to the plasma membrane, and is essential for mesoderm induction and embryonic polarity. The gene encoding MESDC2 maps to human chromosome 15, which houses over 700 genes and comprises nearly 3% of the human genome. Angelman syndrome, Prader-Willi syndrome, Tay-Sachs disease and Marfan syndrome are all associated with defects in chromosome 15-localized genes.

# **REFERENCES**

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## **CHROMOSOMAL LOCATION**

Genetic locus: MESDC2 (human) mapping to 15q25.1; Mesdc2 (mouse) mapping to 7 D3.

## **SOURCE**

MESDC2 (D-19) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of MESDC2 of human origin.

## **PRODUCT**

Each vial contains 100  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-139397 P, (100  $\mu g$  peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

MESDC2 (D-19) is recommended for detection of MESDC2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with MESDC1.

MESDC2 (D-19) is also recommended for detection of MESDC2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for MESDC2 siRNA (h): sc-90278, MESDC2 siRNA (m): sc-149371, MESDC2 shRNA Plasmid (h): sc-90278-SH, MESDC2 shRNA Plasmid (m): sc-149371-SH, MESDC2 shRNA (h) Lentiviral Particles: sc-90278-V and MESDC2 shRNA (m) Lentiviral Particles: sc-149371-V.

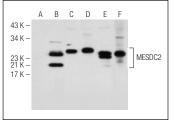
Molecular Weight of MESDC2: 26 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, K-562 whole cell lysate: sc-2203 or NIH/3T3 whole cell lysate: sc-2210.

## **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



MESDC2 (D-19): sc-139397. Western blot analysis of MESDC2 expression in non-transfected 293T: sc-117752 (A), mouse MESDC2 transfected 293T: sc-127144 (B), Jurkat (C), K-562 (D) and NIH/3T3 (E) whole cell Iysates and mouse liver tissue extract (F).

# **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.