

Midline-1 (C-19): sc-55244

BACKGROUND

Midline-1 (tripartite motif-containing protein 18, putative transcription factor XPRF, RING finger protein 59) is a 667 amino acid protein encoded by the human gene MID1. Midline-1 belongs to the TRIM/RBCC family and contains two B-box-type zinc fingers, one B30.2/SPRY domain, one COS domain, one Fibronectin type III domain and one RING-type zinc finger. Midline-1 is believed to have E3 ubiquitin ligase activity which targets the catalytic subunit of protein phosphatase 2 for degradation. It is a cytoplasmic protein found as a homodimer or heterodimer with Midline-2. It also interacts with IGBP1 (lymphocyte signaling protein A4). Defects in MID1 are the cause of Opitz syndrome type I (OS-I). OS-I is an X-linked recessive disorder characterized by hypertelorism, genital-urinary defects such as hypospadias in males and splayed labia in females, lip-palate-laryngotracheal clefts, imperforate anus, developmental delay and congenital heart defects. OS-I mutations produce proteins with a decreased affinity for microtubules.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: MID1 (human) mapping to Xp22.2.

SOURCE

Midline-1 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Midline-1 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-55244 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Midline-1 (C-19) is recommended for detection of Midline-1 of human 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).

Midline-1 (C-19) is also recommended for detection of Midline-1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Midline-1 siRNA (h): sc-62614, Midline-1 shRNA Plasmid (h): sc-62614-SH and Midline-1 shRNA (h) Lentiviral Particles: sc-62614-V.

Molecular Weight of Midline-1: 75 kDa.

Positive Controls: JAR cell lysate: sc-2276.

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.



Try **Midline-1 (2C11): sc-293353**, our highly recommended monoclonal alternative to Midline-1 (C-19).