

# OSTF1 (AT9G4): sc-517418

## BACKGROUND

OSTF1 (osteoclast-stimulating factor 1) is a 214 amino acid cytoplasmic protein that contains 3 ANK repeats and one SH3 domain. The SH3 domain mediates interaction of OSTF1 with SMN. In addition to SMN, OSTF1 interacts with Src and FAS-L. In osteoclasts, OSTF1 is thought to induce bone resorption most likely through a signaling cascade that results in the secretion of factors that enhance osteoclast formation and activity. The gene that encodes OSTF1 consists of almost 59,000 bases and maps to human chromosome 9q21.13. Housing over 900 genes, chromosome 9 comprises nearly 4% of the human genome. Hereditary hemorrhagic telangiectasia, which is characterized by harmful vascular defects, and familial dysautonomia, are both associated with chromosome 9. Notably, chromosome 9 encompasses the largest interferon family gene cluster.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: OSTF1 (human) mapping to 9q21.13; Ostf1 (mouse) mapping to 19 B.

## SOURCE

OSTF1 (AT9G4) is a mouse monoclonal antibody raised against a recombinant protein corresponding to OSTF1 of human origin.

## PRODUCT

Each vial contains 100 µg IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

OSTF1 (AT9G4) is recommended for detection of OSTF1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), flow cytometry (1 µg per 1 x 10<sup>6</sup> cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for OSTF1 siRNA (h): sc-92800, OSTF1 siRNA (m): sc-151336, OSTF1 shRNA Plasmid (h): sc-92800-SH, OSTF1 shRNA Plasmid (m): sc-151336-SH, OSTF1 shRNA (h) Lentiviral Particles: sc-92800-V and OSTF1 shRNA (m) Lentiviral Particles: sc-151336-V.

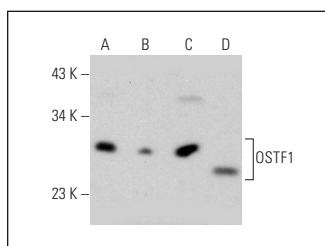
Molecular Weight of OSTF1: 28 kDa.

Positive Controls: NCI-H292 whole cell lysate: sc-364179, CCRF-CEM cell lysate: sc-2225 or T-47D cell lysate: sc-2293.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



OSTF1 (AT9G4): sc-517418. Western blot analysis of OSTF1 expression in NCI-H292 (A), CCRF-CEM (B), T-47D (C) and NRK (D) whole cell lysates.

## 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.