

Sos 2 (C-19): sc-258

BACKGROUND

The superfamily of GTP-binding proteins, of which Ras proteins are prototypes, has been implicated in a broad range of biological activities. Studies have identified a family of guanine nucleotide-releasing factors (GRFs) that activate Ras in mammalian cells and an "adapter" protein (Sem 5/GRB2) that appears to mediate the interaction of GRFs with activated receptor molecules. Ras-GRF p140 promotes nucleotide exchange on Ras p21s but not on other members of the Ras gene superfamily. In addition, three mammalian homologs of the *Drosophila* Ras-GRF, son of sevenless (Sos), have been described. These include two from mouse, mSos 1 and mSos 2, and one from human, hSos. Vav p95 has been reported to function as a GRF in activation of Ras by the T cell receptor and has been reported to have a domain similar to that of Dbl p115, which is a GRF specific for Cdc42Hs. Subsequent to activation, Ras appears to interact with Raf, thereby activating the MAP kinase phosphorylation pathway.

CHROMOSOMAL LOCATION

Genetic locus: SOS2 (human) mapping to 14q21.3; Sos2 (mouse) mapping to 12 C2.

SOURCE

Sos 2 (C-19) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of Sos 2 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-258 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Sos 2 (C-19) is recommended for detection of Sos 2 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Sos 2 (C-19) is also recommended for detection of Sos 2 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for Sos 2 siRNA (h): sc-36525, Sos 2 siRNA (m): sc-36526, Sos 2 shRNA Plasmid (h): sc-36525-SH, Sos 2 shRNA Plasmid (m): sc-36526-SH, Sos 2 shRNA (h) Lentiviral Particles: sc-36525-V and Sos 2 shRNA (m) Lentiviral Particles: sc-36526-V.

Molecular Weight of Sos 2: 155 kDa.

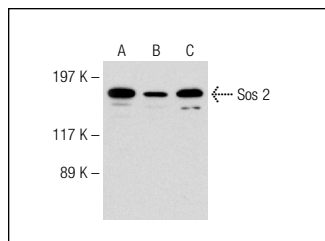
STORAGE

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

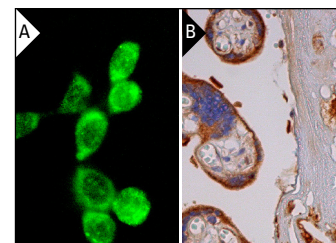
RESEARCH USE

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

DATA



Sos 2 (C-19): sc-258. Western blot analysis of Sos 2 expression in A-431 (A), K-562 (B) and NIH/3T3 (C) whole cell lysates.



Sos 2 (C-19): sc-258. Immunofluorescence staining of methanol-fixed NIH/3T3 cells showing cytoplasmic staining (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing cytoplasmic staining of trophoblastic cells and decidual cells (B).

SELECT PRODUCT CITATIONS

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- Peiretti, A., et al. 2003. CDK2 is involved in the S-phase lengthening induced by glucocorticoids in normal human lymphocytes. *Eur. J. Cell Biol.* 82: 253-261.
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- Iden, S., et al. 2012. Tumor type-dependent function of the par3 polarity protein in skin tumorigenesis. *Cancer Cell* 22: 389-403.

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