

TRAP-1 (C-18): sc-8665

BACKGROUND

Transforming growth factor β (TGF β) receptor associated binding protein (TRAP-1) participates in the regulation of the TGF β signaling pathway. TGF β is a secreted ligand that induces transcription of various targeted genes involved in cell proliferation, differentiation and apoptosis by sequentially binding to surface TGF β type II receptors and inducing the autophosphorylation of the type II receptor and the transient transactivation of the type I TGF β receptor. The signal is then propagated through the Smad family of transcription factors, which leads to the expression of the targeted genes. The cytosolic TRAP-1 protein selectively associates with the phosphorylated type I TGF β receptors, but not with the unphosphorylated type I receptors or type II receptors. TRAP-1 binding to the receptor results in the inhibition of TGF β signaling, thereby inhibiting the transcription of TGF β target genes. The carboxy terminus of TRAP-1 is also able to bind to 5-lipoxygenase, a mediator of lipid metabolism for the production of leukotrienes, where it may then regulate the signaling within leukocytes and other inflammatory mediating cells.

CHROMOSOMAL LOCATION

Genetic locus: TGFBRAP1 (human) mapping to 2q12.1; Tgfbrap1 (mouse) mapping to 1 B.

SOURCE

TRAP-1 (C-18) is available as either goat (sc-8665) or rabbit (sc-8665-R) polyclonal affinity purified antibody raised against a peptide mapping at the C-terminus of TRAP-1 of human origin.

PRODUCT

Each vial contains either 100 μ g (sc-8665) or 200 μ g (sc-8665-R) IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-8665 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TRAP-1 (C-18) is recommended for detection of TRAP-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

TRAP-1 (C-18) is also recommended for detection of TRAP-1 in additional species, including equine and canine.

Suitable for use as control antibody for TRAP-1 siRNA (h): sc-36720, TRAP-1 siRNA (m): sc-36721, TRAP-1 shRNA Plasmid (h): sc-36720-SH, TRAP-1 shRNA Plasmid (m): sc-36721-SH, TRAP-1 shRNA (h) Lentiviral Particles: sc-36720-V and TRAP-1 shRNA (m) Lentiviral Particles: sc-36721-V.

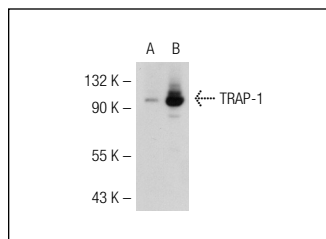
Molecular Weight of TRAP-1: 80 kDa

Positive Controls: TRAP-1 (h): 293T Lysate: sc-113423, A-673 cell lysate: sc-2414 or Hep G2 cell lysate: sc-2227.

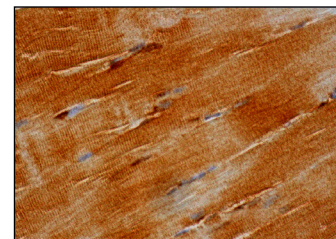
STORAGE

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

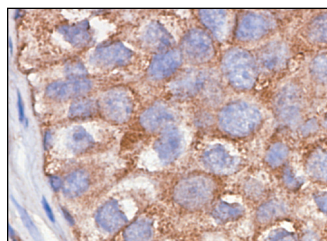
DATA



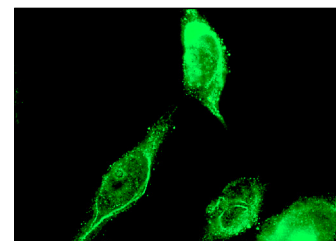
TRAP-1 (C-18): sc-8665. Western blot analysis of TRAP-1 expression in non-transfected: sc-117752 (A) and human TRAP-1 transfected: sc-113423 (B) 293T whole cell lysates.



TRAP-1 (C-18): sc-8665. Immunoperoxidase staining of formalin fixed, paraffin-embedded human skeletal muscle tissue showing cytoplasmic staining of myocytes.



TRAP-1 (C-18): sc-8665. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human breast tumor showing cytoplasmic localization.



TRAP-1 (C-18): sc-8665. Immunofluorescence staining of methanol-fixed MIA PaCa-2 cells showing cytoplasmic localization.

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.

MONOS
Satisfaction
Guaranteed

Try **TRAP-1 (C-8): sc-13134**, our highly recommended monoclonal alternative to TRAP-1 (C-18).