

# TRAP- $\alpha$ (FL-286): sc-134987

## BACKGROUND

The TRAP proteins (translocon-associated proteins), TRAP- $\alpha$ , TRAP- $\beta$ , TRAP- $\gamma$  and TRAP- $\delta$ , are transmembrane proteins that comprise a heterotetramer complex (the signal sequence receptor (SSR) or TRAP complex) that localizes to the endoplasmic reticulum (ER) and functions in regulating the retention of ER resident proteins. The TRAP complex associates with the Sec61 translocon at the ER. Sec61 is the major complex mediating protein translocation across the ER membrane. In addition, the TRAP complex is involved in ER-associated degradation (ERAD); in response to ER stress the TRAP complex subunits are simultaneously induced by the XBP-1/IRE1 $\alpha$  pathway. TRAP- $\alpha$  (also known as SSR1 or SSR- $\alpha$ ), TRAP- $\beta$  (also known as SSR- $\beta$ , SSR2 or TLAP) and TRAP- $\delta$  (also known as SSR4) are all single-pass membrane proteins, while TRAP- $\gamma$  (also known as SSR3 or SSR- $\gamma$ ) contains four transmembrane domains.

## REFERENCES

- Hartmann, E., et al. 1993. A tetrameric complex of membrane proteins in the endoplasmic reticulum. *Eur. J. Biochem.* 214: 375-381.
- Brenner, V., et al. 1997. Genomic organization of two novel genes on human Xq28: compact head to head arrangement of IDH  $\gamma$  and TRAP- $\delta$  is conserved in rat and mouse. *Genomics* 44: 8-14.

## CHROMOSOMAL LOCATION

Genetic locus: SSR1 (human) mapping to 6p24.3; Ssr1 (mouse) mapping to 13 A3.3.

## SOURCE

TRAP- $\alpha$  (FL-286) is a rabbit polyclonal antibody raised against amino acids 1-286 representing full length TRAP- $\alpha$  of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

TRAP- $\alpha$  (FL-286) is recommended for detection of TRAP- $\alpha$  of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], 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).

TRAP- $\alpha$  (FL-286) is also recommended for detection of TRAP- $\alpha$  in additional species, including porcine.

Suitable for use as control antibody for TRAP- $\alpha$  siRNA (h): sc-63153, TRAP- $\alpha$  siRNA (m): sc-63154, TRAP- $\alpha$  shRNA Plasmid (h): sc-63153-SH, TRAP- $\alpha$  shRNA Plasmid (m): sc-63154-SH, TRAP- $\alpha$  shRNA (h) Lentiviral Particles: sc-63153-V and TRAP- $\alpha$  shRNA (m) Lentiviral Particles: sc-63154-V.

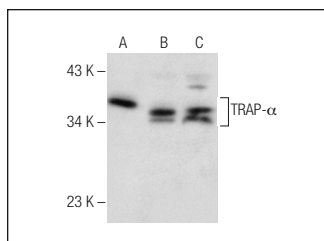
Molecular Weight of TRAP- $\alpha$ : 32 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209, Hep G2 cell lysate: sc-2227 or HeLa whole cell lysate: sc- 2200.

## 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



TRAP- $\alpha$  (FL-286): sc-134987. Western blot analysis of TRAP- $\alpha$  expression in HL-60 (A), Hep G2 (B) and HeLa (C) 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

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Try **TRAP- $\alpha$  (C-8): sc-373916** or **TRAP- $\alpha$  (41-Q): sc-100314**, our highly recommended monoclonal alternatives to TRAP- $\alpha$  (FL-286).