# SANTA CRUZ BIOTECHNOLOGY, INC.

# TRAP-δ (C-6): sc-376706



## 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.

## **CHROMOSOMAL LOCATION**

Genetic locus: SSR4 (human) mapping to Xq28.

## SOURCE

TRAP- $\delta$  (C-6) is a mouse monoclonal antibody raised against amino acids 1-173 representing full length TRAP- $\delta$  of human origin.

## PRODUCT

Each vial contains 200  $\mu g$  IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TRAP- $\delta$  (C-6) is available conjugated to agarose (sc-376706 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-376706 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376706 PE), fluorescein (sc-376706 FITC), Alexa Fluor<sup>®</sup> 488 (sc-376706 AF488), Alexa Fluor<sup>®</sup> 546 (sc-376706 AF546), Alexa Fluor<sup>®</sup> 594 (sc-376706 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-376706 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-376706 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-376706 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

# **RESEARCH USE**

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

# **APPLICATIONS**

TRAP- $\delta$  (C-6) is recommended for detection of TRAP- $\delta$  of human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for TRAP- $\delta$  siRNA (h): sc-63148, TRAP- $\delta$  shRNA Plasmid (h): sc-63148-SH and TRAP- $\delta$  shRNA (h) Lentiviral Particles: sc-63148-V.

Molecular Weight of TRAP-δ: 19 kDa.

Positive Controls: JAR cell lysate: sc-2276, U-2 OS cell lysate: sc-2295 or HeLa whole cell lysate: sc-2200.

#### **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> 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-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG $\kappa$  BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA



TRAP-8 (C-6): sc-376706. Fluorescent western blot analysis of TRAP-8 expression in JAR (A), U-2 OS (B) and HeLa (C) whole cell lysates. Blocked with UltraCruz<sup>®</sup> Blocking Reagent: sc-51324. Detection reagent used: m-IgG, IP-CFL 488: sc-533661.



TRAP-& (C-6): sc-376706. Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing cytoplasmic staining of exocrine glandular cells (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing cytoplasmic staining of exocrine glandular cells. Blocked with 0.25X UltraCruz<sup>®</sup> Blocking Reagent: sc-516214. Detected with m-IgGk BP-B: sc-516142 and ImmunoCruz<sup>®</sup> ABC Kit: sc-516216 (**B**).

## **SELECT PRODUCT CITATIONS**

 Graner, A.N., et al. 2017. HSP90 inhibitors in the context of heat shock and the unfolded protein response: effects on a primary canine pulmonary adenocarcinoma cell line. Int. J. Hyperthermia 33: 303-317.

#### **STORAGE**

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

### **PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.

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