

# AGTRAP (F-6): sc-271367

## BACKGROUND

AGTRAP (Angiotensin II receptor-associated protein), also known as ATRAP, is a transmembrane protein that localizes to the Golgi apparatus, the endoplasmic reticulum (ER), endocytotic vesicles and perinuclear vesicular structures. Highly expressed in heart, kidney, pancreas and thyroid, AGTRAP functions as a negative regulator of the Angiotensin II type I receptor (AT1). AGTRAP controls receptor internalization and receptor desensitization events (such as phosphorylation) and, through this control, decreases Angiotensin II signaling, thereby reducing rates of cell proliferation and Angiotensin II-stimulated transcriptional activity. AGTRAP is 159 amino acids in length and is able to bind RACK1 (receptor for activated C kinase 1); an association that is thought to help recruit AGTRAP to AT1. Two isoforms of AGTRAP exist due to alternative splicing events.

## CHROMOSOMAL LOCATION

Genetic locus: AGTRAP (human) mapping to 1p36.22.

## SOURCE

AGTRAP (F-6) is a mouse monoclonal antibody raised against amino acids 1-159 representing full length AGTRAP of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

AGTRAP (F-6) is available conjugated to agarose (sc-271367 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-271367 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-271367 PE), fluorescein (sc-271367 FITC), Alexa Fluor® 488 (sc-271367 AF488), Alexa Fluor® 546 (sc-271367 AF546), Alexa Fluor® 594 (sc-271367 AF594) or Alexa Fluor® 647 (sc-271367 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-271367 AF680) or Alexa Fluor® 790 (sc-271367 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

## STORAGE

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

## APPLICATIONS

AGTRAP (F-6) is recommended for detection of AGTRAP 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for AGTRAP siRNA (h): sc-78862, AGTRAP shRNA Plasmid (h): sc-78862-SH and AGTRAP shRNA (h) Lentiviral Particles: sc-78862-V.

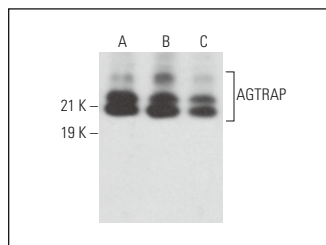
Molecular Weight of AGTRAP: 18 kDa.

Positive Controls: U-87 MG cell lysate: sc-2411, Daudi cell lysate: sc-2415 or K-562 whole cell lysate: sc-2203.

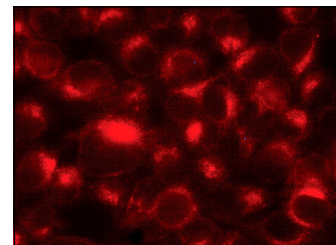
## RECOMMENDED SUPPORT REAGENTS

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



AGTRAP (F-6): sc-271367. Western blot analysis of AGTRAP expression in U-87 MG (A), Daudi (B) and K-562 (C) whole cell lysates.



AGTRAP (F-6): sc-271367. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

## SELECT PRODUCT CITATIONS

- Wang, Z., et al. 2016. The IL-24 gene protects human umbilical vein endothelial cells against H<sub>2</sub>O<sub>2</sub>-induced injury and may be useful as a treatment for cardiovascular disease. *Int. J. Mol. Med.* 37: 581-592.
- Xie, X., et al. 2022. Melatonin inhibits Angiotensin II-induced atrial fibrillation through preventing degradation of Ang II type I receptor-associated protein (ATRAP). *Biochem. Pharmacol.* 202: 115146.
- Hong, K., et al. 2022. Pan-cancer analysis of the Angiotensin II receptor-associated protein as a prognostic and immunological gene predicting immunotherapy responses in pan-cancer. *Front. Cell Dev. Biol.* 10: 913684.

## 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) for detailed protocols and support products.

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