

# AP-3 $\beta$ (N-15): sc-13384

## BACKGROUND

The widely expressed adaptor-like complex AP-3 is involved in protein sorting in exocytic/endocytic pathways and is composed of four distinct subunits. One of these subunits, AP-3 $\beta$ , also known as  $\beta$ 3A-Adaptin, is closely related to the neuron-specific protein  $\beta$ -NAP and shares 61% overall identity.  $\beta$ -NAP (also known as  $\beta$ -3B-Adaptin) is a homolog of the  $\beta$ / $\beta'$ -Adaptins.  $\beta$ -NAP is related to one of the adaptor subunits of Clathrin-coated vesicles and is also part of an adaptor-like complex which is not associated with Clathrin. Casein kinase I selectively phosphorylates the AP-3 $\beta$  and  $\beta$ -NAP subunits at its hinge domain; inhibiting the kinase hinders the recruitment of AP-3 to synaptic vesicles.

## REFERENCES

1. Simpson, F., Bright, N.A., West, M.A., Newman, L.S., Darnell, R.B. and Robinson, M.S. 1996. A novel adaptor-related protein complex. *J. Cell Biol.* 133: 749-760.
2. Dell'Angelica, E.C., Ooi, C.E. and Bonifacino, J.S. 1997.  $\beta$ -3A-Adaptin, a subunit of the adaptor-like complex AP-3. *J. Biol. Chem.* 272: 15078-15084.

## CHROMOSOMAL LOCATION

Genetic locus: AP3B1 (human) mapping to 5q13.3; Ap3b1 (mouse) mapping to 13 D1.

## SOURCE

AP-3 $\beta$  (N-15) is available as either goat (sc-13384) or rabbit (sc-13384-R) polyclonal affinity purified antibody raised against a peptide mapping at the N-terminus of AP-3 $\beta$  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.

Blocking peptide available for competition studies, sc-13384 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

AP-3 $\beta$  (N-15) is recommended for detection of AP-3 $\beta$  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).

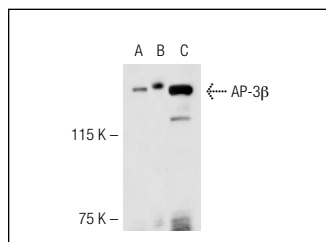
AP-3 $\beta$  (N-15) is also recommended for detection of AP-3 $\beta$  in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for AP-3 $\beta$  siRNA (h): sc-41165 and AP-3 $\beta$  siRNA (m): sc-41166; and as shRNA Plasmid control antibody for AP-3 $\beta$  shRNA Plasmid (h): sc-41165-SH and AP-3 $\beta$  shRNA Plasmid (m): sc-41166-SH.

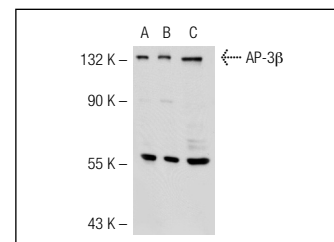
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: for rabbit primary antibody (sc-13384-R): use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), for goat primary antibody (sc-13384): use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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: for rabbit primary antibody (sc-13384-R): 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<sup>™</sup> Mounting Medium: sc-24941, for goat primary antibody (sc-13384): use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

## DATA



AP-3 $\beta$  (N-15)-R: sc-13384-R. Western blot analysis of AP-3 $\beta$  expression in non-transfected 293T: sc-117752 (A), human AP-3 $\beta$  transfected 293T: sc-114819 (B) and HeLa (C) whole cell lysates.



AP-3 $\beta$  (N-15): sc-13384. Western blot analysis of AP-3 $\beta$  expression in non-transfected 293T: sc-117752 (A), mouse AP-3 $\beta$  transfected 293T: sc-118449 (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.

## 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 **AP-3 $\beta$  (3B4): sc-517083**, our highly recommended monoclonal alternative to AP-3 $\beta$  (N-15).