

# APPBP2 (H-24): sc-130957

## BACKGROUND

APPBP2 ( $\beta$ -Amyloid precursor protein-binding protein 2), also known as protein interacting with APP tail 1 (PAT1) or ARA67, is a hydrophilic, microtubule binding protein that functions in the trafficking of  $\beta$ -Amyloid precursor protein. It is expressed in a variety of cell types and localizes to the cytoplasm. APPBP2 shares homology with kinesin light chain. It consists of a coiled-coil domain, PKC phosphorylation sites, four imperfect C-terminal tandem repeats, eight tetratricopeptide repeats and N- and C-terminal globular structures. APPBP2 recognizes and binds to the basolateral sorting sequence (BaSS) present in the cytoplasmic domain of the  $\beta$ -Amyloid precursor protein. In addition, APPBP2 interacts with the androgen receptor and suppresses androgen signaling.

## REFERENCES

- Nagase, T., et al. 1996. Prediction of the coding sequences of unidentified human genes. VI. The coding sequences of 80 new genes (KIAA0201-KIAA0280) deduced by analysis of cDNA clones from cell line KG-1 and brain. *DNA Res.* 3: 321-329, 341-354.
- Monni, O., et al. 2001. Comprehensive copy number and gene expression profiling of the 17q23 amplicon in human breast cancer. *Proc. Natl. Acad. Sci. USA* 98: 5711-5716.
- Hirasawa, A., et al. 2003. Association of 17q21-q24 gain in ovarian clear cell adenocarcinomas with poor prognosis and identification of PPM1D and APPBP2 as likely amplification targets. *Clin. Cancer Res.* 9: 1995-2004.
- Zhang, Y., et al. 2004. ARA67/PAT1 functions as a repressor to suppress androgen receptor transactivation. *Mol. Cell. Biol.* 24: 1044-1057.
- Miyauchi, S., et al. 2005. Isolation and function of the amino acid transporter PAT1 (slc36a1) from rabbit and discrimination between transport via PAT1 and system IMINO in renal brush-border membrane vesicles. *Mol. Membr. Biol.* 22: 549-559.
- Coller, J. and Parker, R. 2005. General translational repression by activators of mRNA decapping. *Cell* 122: 875-886.
- Hsu, C.L., et al. 2005. Androgen receptor (AR) NH<sub>2</sub>- and COOH-terminal interactions result in the differential influences on the AR-mediated transactivation and cell growth. *Mol. Endocrinol.* 19: 350-361.

## CHROMOSOMAL LOCATION

Genetic locus: APPBP2 (human) mapping to 17q23.2; Appbp2 (mouse) mapping to 11 C.

## SOURCE

APPBP2 (H-24) is an affinity purified rabbit polyclonal antibody raised against synthetic APPBP2 peptide of human origin.

## PRODUCT

Each vial contains 50  $\mu$ g IgG in 500  $\mu$ l PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## RESEARCH USE

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

## APPLICATIONS

APPBP2 (H-24) is recommended for detection of APPBP2 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for APPBP2 siRNA (h): sc-106762, APPBP2 siRNA (m): sc-141177, APPBP2 shRNA Plasmid (h): sc-106762-SH, APPBP2 shRNA Plasmid (m): sc-141177-SH, APPBP2 shRNA (h) Lentiviral Particles: sc-106762-V and APPBP2 shRNA (m) Lentiviral Particles: sc-141177-V.

Molecular Weight (predicted) of APPBP2: 67 kDa.

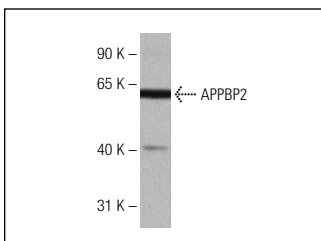
Molecular Weight (observed) of APPBP2: 63 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209 or human fetal brain tissue extract.

## 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<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (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).

## DATA



APPBP2 (H-24): sc-130957. Western blot analysis of APPBP2 expression in human fetal brain tissue extract.

## STORAGE

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

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Try **APPBP2 (4-RE24): sc-134266**, our highly recommended monoclonal alternative to APPBP2 (H-24).