SANTA CRUZ BIOTECHNOLOGY, INC.

APPBP2 (E-21): sc-130691



BACKGROUND

APPBP2 (β -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 β -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 β -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.
- 4. 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) NH₂- and COOH-terminal interactions result in the differential influences on the AR-mediated transactivation and cell growth. Mol. Endocrinol. 19: 350-361.
- Kuan, Y.H., et al. 2006. PAT1a modulates intracellular transport and processing of amyloid precursor protein (APP), APLP1, and APLP2. J. Biol. Chem. 281: 40114-40123.

CHROMOSOMAL LOCATION

Genetic locus: APPBP2 (human) mapping to 17q23.2.

SOURCE

APPBP2 (E-21) is a purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of APPBP2 of human origin.

PRODUCT

Each vial contains 100 μg IgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

APPBP2 (E-21) is recommended for detection of APPBP2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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 shRNA Plasmid (h): sc-106762-SH and APPBP2 shRNA (h) Lentiviral Particles: sc-106762-V.

Molecular Weight (predicted) of APPBP2: 67 kDa.

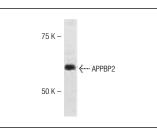
Molecular Weight (observed) of APPBP2: 63 kDa.

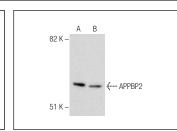
Positive Controls: HL-60 whole cell lysate: sc-2209, CCRF-CEM cell lysate: sc-2225 or Jurkat whole cell lysate: sc-2204.

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).

DATA





APPBP2 (E-21): sc-130691. Western blot analysis of APPBP2 expression in HL-60 whole cell lysate. APPBP2 (E-21): sc-130691. Western blot analysis of APPBP2 expression in Jurkat (A) and CCRF-CEM (B) whole cell lysates.

STORAGE

Store at 4° C, **D0 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.

MONOS Satisfation Guaranteed Try APPBP2 (4-RE24): sc-134266, our highly recommended monoclonal alternative to APPBP2 (E-21).