SANTA CRUZ BIOTECHNOLOGY, INC.

EAP30 (D-19): sc-68972

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

EAP30 (ELL-associated protein of 30 kDa), also known as SNF8, Dot3 or VPS22, is a 258 amino acid protein that localizes to both the nucleus and the cytoplasm and is a member of the SNF8 family of vacuolar sorting proteins. Expressed as two alternatively spliced isoforms, EAP30 is a component of the multi-protein ESCRT-II complex that is involved in the formation of multivesicular bodies (MVBs) and in the sorting of endosomal cargo proteins within MVBs. In addition to its role in the formation and maintenance of MVBs, the ESCRT-II complex plays a role in targeting proteins to the lysosome for degradation and is also thought to repress the activity of RNA polymerase II (Pol II), thereby regulating transcription. As a member of the ESCRT-II complex, EAP30 is involved in MVB pathways and transcriptional regulation events.

REFERENCES

1. Schmidt, A.E., et al. 1999. Cloning and characterization of the EAP30 subunit of the ELL complex that confers derepression of transcription by RNA polymerase II. J. Biol. Chem. 274: 21981-21985.
2. Kamura, T., et al. 2001. Cloning and characterization of ELL-associated proteins EAP45 and EAP20. a role for yeast EAP-like proteins in regulation of gene expression by glucose. J. Biol. Chem. 276: 16528-16533.
3. Martin-Serrano, J., et al. 2003. Divergent retroviral late-budding domains recruit vacuolar protein sorting factors by using alternative adaptor proteins. Proc. Natl. Acad. Sci. USA 100: 12414-12419.
4. Wernimont, A.K., et al. 2004. Crystal structure of subunit VPS25 of the endosomal trafficking complex ESCRT-II. BMC Struct. Biol. 4: 10.
5. Teo, H., et al. 2004. ESCRT-II, an endosome-associated complex required for protein sorting: crystal structure and interactions with ESCRT-III and membranes. Dev. Cell 7: 559-569.
6. Hierro, A., et al. 2004. Structure of the ESCRT-II endosomal trafficking complex. Nature 431: 221-225.
7. Slagsvold, T., et al. 2005. Eap45 in mammalian ESCRT-II binds ubiquitin via a phosphoinositide-interacting GLUE domain. J. Biol. Chem. 280: 19600-19606.

CHROMOSOMAL LOCATION

Genetic locus: SNF8 (human) mapping to 17q21.32; Snf8 (mouse) mapping to 11 D.

SOURCE

EAP30 (D-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of EAP30 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-68972 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

EAP30 (D-19) is recommended for detection of EAP30 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

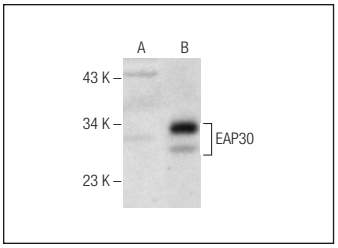
EAP30 (D-19) is also recommended for detection of EAP30 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for EAP30 siRNA (h): sc-77279, EAP30 siRNA (m): sc-77280, EAP30 shRNA Plasmid (h): sc-77279-SH, EAP30 shRNA Plasmid (m): sc-77280-SH, EAP30 shRNA (h) Lentiviral Particles: sc-77279-V and EAP30 shRNA (m) Lentiviral Particles: sc-77280-V.

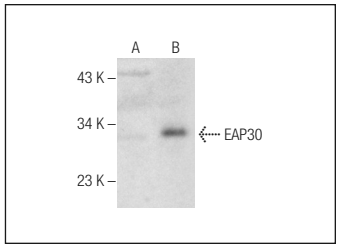
Molecular Weight of EAP30: 30 kDa.

Positive Controls: EAP30 (m): 293T Lysate: sc-125279 or EAP30 (h2): 293T Lysate: sc-115458.

DATA



EAP30 (D-19): sc-68972. Western blot analysis of EAP30 expression in non-transfected: sc-117752 (**A**) and mouse EAP30 transfected: sc-125279 (**B**) 293T whole cell lysates.



EAP30 (D-19): sc-68972. Western blot analysis of EAP30 expression in non-transfected: sc-117752 (**A**) and human EAP30 transfected: sc-115458 (**B**) 293T 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.

RESEARCH USE

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

PROTOCOLS

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