

Eap45 (K-18): sc-79930

BACKGROUND

Vacuolar sorting proteins (VPSs) are required for trafficking normal endocytic and biosynthetic proteins to the vacuole and also play an important role in the budding process of cells. The ESCRT-II (endosomal sorting complex required for transport II) complex, which is involved in endocytosis of ubiquitinated membrane proteins, is formed by Eap45, EAP30, and VPS25. These vacuolar sorting proteins are also involved in a multiprotein complex with RNA polymerase II elongation factor (ELL). Eap45 (ELL-associated protein of 45 kDa), also known as vacuolar protein-sorting-associated protein 36, is a 386 amino acid protein containing a GLUE (GRAM-like ubiquitin-binding in Eap45) domain that mediates the binding to ubiquitin and phosphoinositides. Since Eap45 colocalizes with ubiquitinated proteins on late endosomes, it is likely that Eap45 plays a role in the endosomal sorting of ubiquitinated cargo. There are two isoforms of Eap45 that exist as a result of alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: VPS36 (human) mapping to 13q14.3; Vps36 (mouse) mapping to 8 A2.

SOURCE

Eap45 (K-18) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of Eap45 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-79930 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Eap45 (K-18) is recommended for detection of Eap45 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Eap45 (K-18) is also recommended for detection of Eap45 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Eap45 siRNA (h): sc-77215, Eap45 siRNA (m): sc-77216, Eap45 shRNA Plasmid (h): sc-77215-SH, Eap45 shRNA Plasmid (m): sc-77216-SH, Eap45 shRNA (h) Lentiviral Particles: sc-77215-V and Eap45 shRNA (m) Lentiviral Particles: sc-77216-V.

Molecular Weight of Eap45: 45 kDa.

Positive Controls: Mouse ovary extract: sc-2404.

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) Immunofluorescence: 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[™] Mounting Medium: sc-24941.

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.