

EML1 (K-16): sc-47879

BACKGROUND

Echinoderm microtubule-associated proteins function to modify the assembly dynamics of microtubules by making microtubules slightly longer yet more dynamic. They are classified as ubiquitous due to their expression in most tissues, however, their expression does not occur in the thymus nor the peripheral blood lymphocytes. In the human form of the protein, there is a WD40 domain that is also contained in a number of eukaryotic proteins that carries out functions including signal transduction using adaptor/regulatory modules, pre-mRNA processing and cytoskeleton assembly. EML1 (echinoderm microtubule-associated protein-like 1 or EMAP-1) may be a candidate gene for Usher syndrome type 1A. Usher syndromes (USHs) are a group of genetic disorders consisting of congenital deafness, retinitis pigmentosa and vestibular dysfunction of variable onset and severity depending on the genetic type.

REFERENCES

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- Daggett, M.A., et al. 1998. Overexpression of the a WD-40 repeat protein, in baculovirus-infected Sf9 cells. *Cell Motil. Cytoskeleton* 41: 57-67.
- Suprenant, K.A., et al. 2000. Conservation of the WD-repeat, microtubule-binding protein, EMAP, in sea urchins, humans, and the nematode *C. elegans*. *Dev. Genes Evol.* 210: 2-10.
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- De Keersmaecker, K., et al. 2005. Fusion of EML1 to ABL1 in T cell acute lymphoblastic leukemia with cryptic t(9;14)(q34;q32). *Blood* 105: 4849-4852.

CHROMOSOMAL LOCATION

Genetic locus: EML1 (human) mapping to 14q32.2.

SOURCE

EML1 (K-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of EML1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-47879 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

EML1 (K-16) is recommended for detection of EML1 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)], 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).

EML1 (K-16) is also recommended for detection of EML1 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for EML1 siRNA (h): sc-60576, EML1 shRNA Plasmid (h): sc-60576-SH and EML1 shRNA (h) Lentiviral Particles: sc-60576-V.

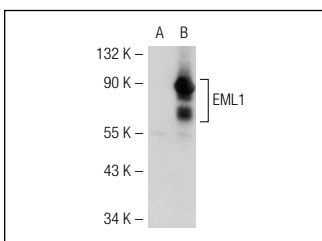
Molecular Weight of EML1: 90 kDa.

Positive Controls: EML1 (h): 293T Lysate: sc-115201 or Hep G2 cell lysate: sc-2227.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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). 3) Immunofluorescence: 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™ Mounting Medium: sc-24941.

DATA



EML1 (K-16): sc-47879. Western blot analysis of EML1 expression in non-transfected: sc-117752 (A) and human EML1 transfected: sc-115201 (B) 293T whole cell lysates.

RESEARCH USE

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

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Try **EML1 (B-3): sc-390841**, our highly recommended monoclonal alternative to EML1 (K-16).