## 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, 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 micro-tubule-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

1. Li, Q. and Suprenant, K.A. 1995. Molecular characterization of the 77 kDa echinoderm microtubule-associated protein. Homology to the $\beta$-transducin family. J. Biol. Chem. 269: 31777-31784.
2. Eudy, J.D., et al. 1997. Isolation of a novel human homologue of the gene coding for echinoderm microtubule-associated protein (EMAP) from the Usher syndrome type 1a locus at 14q32. Genomics 43: 104-106.

## CHROMOSOMAL LOCATION

Genetic locus: EML1 (human) mapping to 14q32.2; Eml1 (mouse) mapping to 12 F1.

## SOURCE

EML1 (H-61) is a rabbit polyclonal antibody raised against amino acids 60-120 mapping within an internal region of EML1 of human origin.

## PRODUCT

Each vial contains $200 \mu \mathrm{gg} \lg$ in 1.0 ml of PBS with $<0.1 \%$ sodium azide and $0.1 \%$ gelatin.

## APPLICATIONS

EML1 (H-61) is recommended for detection of EML1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation $[1-2 \mu \mathrm{~g}$ per 100-500 $\mu \mathrm{g}$ 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 (H-61) is also recommended for detection of EML1 in additional species, including equine, canine, porcine and avian.

Suitable for use as control antibody for EML1 siRNA (h): sc-60576, EML1 siRNA (m): sc-144642, EML1 shRNA Plasmid (h): sc-60576-SH, EML1 shRNA Plasmid (m): sc-144642-SH, EML1 shRNA (h) Lentiviral Particles: sc-60576-V and EML1 shRNA (m) Lentiviral Particles: sc-144642-V.

Molecular Weight of EML1: 90 kDa .
Positive Controls: EML1 (h): 293T Lysate: sc-115201.

## 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 ${ }^{\top \mathrm{M}}$ compatible goat antirabbit 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 $/ 2.0 \mathrm{ml}$ ). 3) 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 ${ }^{\text {™ }}$ Mounting Medium: sc-24941.

## DATA



EML1 (H-61): sc-292183. Western blot analysis of EML1 expression in non-transfected: sc-117752 (A) and human EML1 transfected: sc-115201 (B) 293T whole cell lysates.

## STORAGE

Store at $4^{\circ} \mathrm{C},{ }^{* *}$ 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.

Try EML1 (B-3): sc-390841, our highly recommended monoclonal alternative to EML1 (H-61).

