SANTA CRUZ BIOTECHNOLOGY, INC.

EML3 (S-15): sc-161559

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

At the onset of mitosis, assembly of the mitotic spindle requires a global change in the activity of microtubule-binding proteins. EML3 (echinoderm microtubule-associated protein-like 3) is a 896 amino acid protein that likely modifies microtubule dynamics by making them longer. Through colocalization with spindle microtubules during mitosis, EML3 plays a role in correct metaphase chromosome alignment. EML3 contains a nuclear localization signal and a microtubule-binding domain. The gene encoding EML3 maps to human chromosome 11, which houses over 1,400 genes and comprises nearly 4% of the human genome. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are associated with defects in genes that maps to chromosome 11.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: EML3 (human) mapping to 11q12.3; Eml3 (mouse) mapping to 19 A.

SOURCE

EML3 (S-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of EML3 of human origin.

STORAGE

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

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-161559 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

EML3 (S-15) is recommended for detection of EML3 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); non cross-reactive with other EML family members.

Suitable for use as control antibody for EML3 siRNA (h): sc-97042, EML3 siRNA (m): sc-144644, EML3 shRNA Plasmid (h): sc-97042-SH, EML3 shRNA Plasmid (m): sc-144644-SH, EML3 shRNA (h) Lentiviral Particles: sc-97042-V and EML3 shRNA (m) Lentiviral Particles: sc-144644-V.

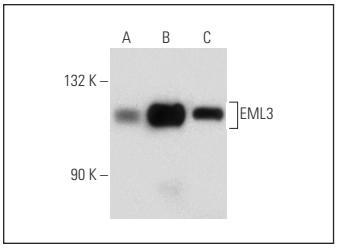
Molecular Weight of EML3: 95 kDa.

Positive Controls: COLO 320DM cell lysate: sc-2226, HeLa whole cell lysate: sc-2200 or T24 cell lysate: sc-2292.

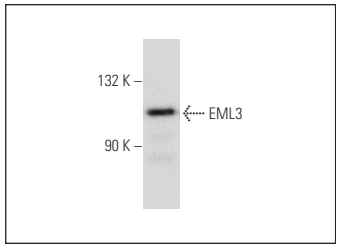
RECOMMENDED SECONDARY REAGENTS

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



EML3 (S-15): sc-161559. Western blot analysis of EML3 expression in HeLa (**A**), COLO 320DM (**B**) and T24 (**C**) whole cell lysates.



EML3 (S-15): sc-161559. Western blot analysis of EML3 expression in mouse spleen tissue extract.

RESEARCH USE

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