

Elmo2 (E-16): sc-21655

BACKGROUND

Elmo (engulfment and cell motility) proteins share similarity to *C. elegans* CED-12. The *C. elegans* genes *ced-2*, *ced-5*, *ced-10*, and *ced-12* and their mammalian homologs Crk II, Dock1, Rac 1 and Elmo mediate cyto-skeletal rearrangements during phagocytosis of apoptotic cells and cell motility. Elmo1 associates with DOCK 180 and may influence phagocytosis and effect cell shape changes. Src family kinase mediated tyrosine phosphorylation of ELMO1 influences signaling through Elmo1/Crk/DOCK 180 pathways. Elmo2 interacts directly with Rho G in a GTP-dependent manner and forms a ternary complex with DOCK 180 to induce activation of Rac 1. The Rho G-Elmo2-DOCK 180 pathway is required for activation of Rac 1 and cell spreading mediated by integrin, as well as for neurite outgrowth induced by nerve growth factor. Elmo3 acts in association with DOCK 180 and Crk II and may be required in complex with DOCK 180 to activate Rac/Rho small GTPases.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ELMO2 (human) mapping to 20q13.12; Elmo2 (mouse) mapping to 2 H3.

SOURCE

Elmo2 (E-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Elmo2 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-21655 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Elmo2 (E-16) is recommended for detection of Elmo2 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).

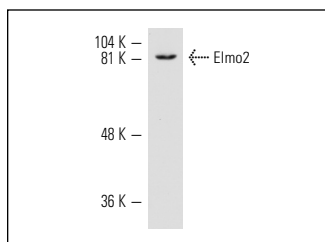
Elmo2 (E-16) is also recommended for detection of Elmo2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Elmo2 siRNA (h): sc-40527, Elmo2 siRNA (m): sc-40528, Elmo2 shRNA Plasmid (h): sc-40527-SH, Elmo2 shRNA Plasmid (m): sc-40528-SH, Elmo2 shRNA (h) Lentiviral Particles: sc-40527-V and Elmo2 shRNA (m) Lentiviral Particles: sc-40528-V.

Molecular Weight of Elmo2: 84 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

DATA



Elmo2 (E-16): sc-21655. Western blot analysis of Elmo2 expression in Jurkat whole cell lysate.

SELECT PRODUCT CITATIONS

- Ho, E., et al. 2009. Integrin-linked kinase interactions with ELMO2 modulate cell polarity. *Mol. Biol. Cell* 20: 3033-3043.

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.