

# ELMOD1 (K-18): sc-82875

## BACKGROUND

ELMOD1 (ELMO/CED-12 domain containing 1), is a 334 amino acid protein that contains one ELMO domain and is encoded by a gene that maps to human chromosome 11. With approximately 135 million base pairs and 1,400 genes, chromosome 11 comprises approximately 4% of human genomic DNA and is considered a gene and disease association dense chromosome. The chromosome 11 encoded *Atm* gene is important for regulation of cell cycle arrest and apoptosis following double strand DNA breaks. *Atm* mutation leads to the disorder known as ataxia-telangiectasia. The blood disorders Sickle cell anemia and thalassemia are caused by *HBB* gene mutations, while Wilms' tumors, WAGR syndrome and Denys-Drash syndrome are associated with mutations of the *WT1* gene. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are also associated with defects in chromosome 11.

## REFERENCES

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5. Taylor, T.D., et al. 2006. Human chromosome 11 DNA sequence and analysis including novel gene identification. *Nature* 440: 497-500.
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## CHROMOSOMAL LOCATION

Genetic locus: ELMOD1 (human) mapping to 11q22.3; Elmod1 (mouse) mapping to 9 A5.3.

## SOURCE

ELMOD1 (K-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ELMOD1 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  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-82875 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ELMOD1 (K-18) is recommended for detection of ELMOD1 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); non cross-reactive with family member ELMOD2.

ELMOD1 (K-18) is also recommended for detection of ELMOD1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for ELMOD1 siRNA (h): sc-77261, ELMOD1 siRNA (m): sc-77262, ELMOD1 shRNA Plasmid (h): sc-77261-SH, ELMOD1 shRNA Plasmid (m): sc-77262-SH, ELMOD1 shRNA (h) Lentiviral Particles: sc-77261-V and ELMOD1 shRNA (m) Lentiviral Particles: sc-77262-V.

Molecular Weight of ELMOD1: 39 kDa.

## 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) 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.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.