# COTL1 (AT1D6): sc-517396



The Power to Question

#### **BACKGROUND**

COTL1 (coactosin-like 1), also known as CLP, is a 142 amino acid cytoplasmic and cytoskeletal protein that belongs to the actin-binding proteins ADF family and coactosin subfamily. Widely expressed, COTL1 was first identified in slime mold and is found at highest levels in kidney, placenta, lung and peripheral blood leukocytes, with low levels found in pancreas, liver and brain. COTL1 is one of many proteins that participate in regulation of Actin's cytoskeleton through a calcium dependent mechanism, but has not been shown to have a direct effect on Actin depolymerization. COTL1 contains one ADF-H domain and interacts with 5-LO (5-lipoxygenase), an enzyme that plays a role in the biosynthesis of leukotriene and is expressed in multiple types of leukocytes. The gene encoding COTL1 maps to human chromosome 16q24.1.

# **REFERENCES**

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# CHROMOSOMAL LOCATION

Genetic locus: COTL1 (human) mapping to 16q24.1.

#### **SOURCE**

COTL1 (AT1D6) is a mouse monoclonal antibody raised against a recombinant protein corresponding to amino acids 1-142 of COTL1 of human origin.

#### **PRODUCT**

Each vial contains 100  $\mu g$   $lgG_{2b}$  kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

### **APPLICATIONS**

COTL1 (AT1D6) is recommended for detection of COTL1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), flow cytometry (1  $\mu$ g per 1 x 10<sup>6</sup> cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for COTL1 siRNA (h): sc-93010, COTL1 shRNA Plasmid (h): sc-93010-SH and COTL1 shRNA (h) Lentiviral Particles: sc-93010-V.

Molecular Weight of COTL1: 16 kDa.

# **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048.

#### **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 for detailed protocols and support products.

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