10320 Camino Santa Fe, Suite G
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Tel: 858.875.1900 Fax: 858.875.1999

# COTL1 Antibody
**Purified Mouse Monoclonal Antibody**
**Catalog # AO1670a**

## Specification

## COTL1 Antibody - Product Information

| | |
|---|---|
| Application | **WB, IHC, E** |
| Primary Accession | Q14019 |
| Reactivity | **Human** |
| Host | **Mouse** |
| Clonality | **Monoclonal** |
| Isotype | **IgG1** |
| Calculated MW | **16kDa KDa** |

**Description**
This gene encodes one of the numerous actin-binding proteins which regulate the actin cytoskeleton. This protein binds F-actin, and also interacts with 5-lipoxygenase, which is the first committed enzyme in leukotriene biosynthesis. Although this gene has been reported to map to chromosome 17 in the Smith-Magenis syndrome region, the best alignments for this gene are to chromosome 16. The Smith-Magenis syndrome region is the site of two related pseudogenes.

**Immunogen**
Purified recombinant fragment of human COTL1 expressed in E. Coli. <br />

**Formulation**
Purified antibody in PBS with 0.05% sodium azide

## COTL1 Antibody - Additional Information

**Gene ID** 23406

**Other Names**
Coactosin-like protein, COTL1, CLP

**Dilution**
WB~~1/500 - 1/2000
IHC~~1/200 - 1/1000
E~~1/10000

**Storage**
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**
COTL1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## COTL1 Antibody - Protein Information

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**Name** COTL1

**Synonyms** CLP

**Function**
Binds to F-actin in a calcium-independent manner. Has no direct effect on actin depolymerization. Acts as a chaperone for ALOX5 (5LO), influencing both its stability and activity in leukotrienes synthesis.

**Cellular Location**
Cytoplasm. Cytoplasm, cytoskeleton. Nucleus

**Tissue Location**
Widely expressed with highest levels in placenta, lung, kidney and peripheral blood leukocytes and lower levels in brain, liver and pancreas.

## COTL1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

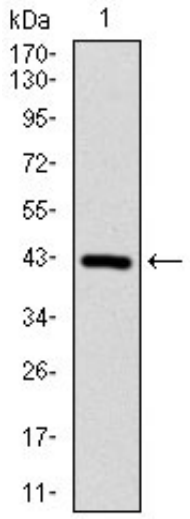



Figure 1: Western blot analysis using COTL1 mAb against human COTL1 (AA: 1-142) recombinant protein. (Expected MW is 16 kDa)

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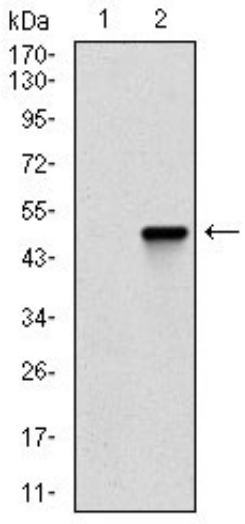



Figure 2: Western blot analysis using COTL1 mAb against HEK293 (1) and COTL1 (AA: 1-142)-hIgGFc transfected HEK293 (2) cell lysate.

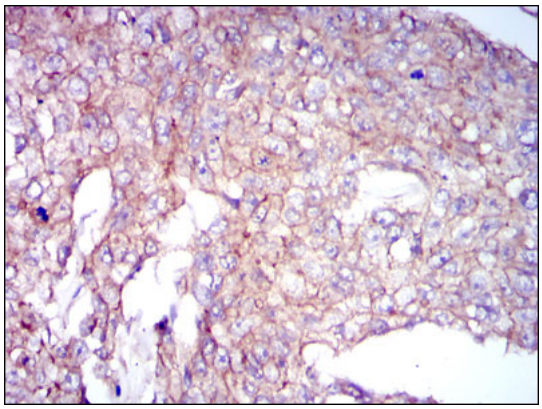


Figure 3: Immunohistochemical analysis of paraffin-embedded breast cancer tissues using COTL1 mouse mAb with DAB staining.

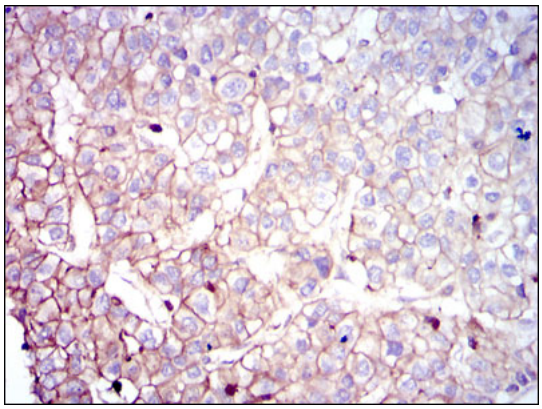
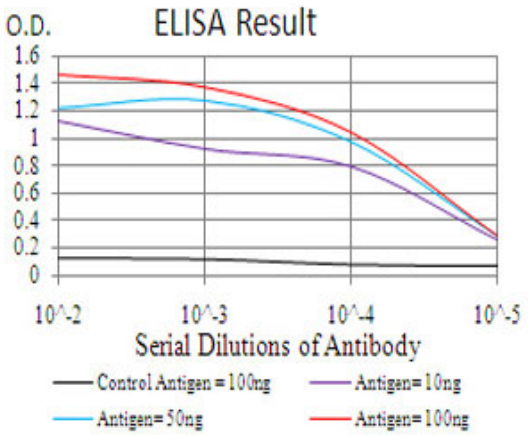


Figure 4: Immunohistochemical analysis of paraffin-embedded liver cancer tissues using COTL1 mouse mAb with DAB staining.

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## COTL1 Antibody - References

1. Biochem J. 2009 Dec 14;425(1):265-74. 2. Exp Mol Med. 2009 May 31;41(5):354-61.