

## Recombinant Aconitase 1/ACO1 Monoclonal Antibody

catalog number: **AN301871L**

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

### Description

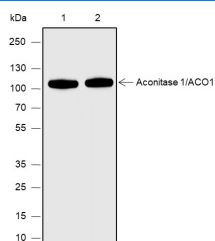
<b>Reactivity</b>	Human;Rat;Mouse
<b>Immunogen</b>	Recombinant human Aconitase 1/ACO1 fragment
<b>Host</b>	Rabbit
<b>Isotype</b>	IgG, $\kappa$
<b>Clone</b>	A583
<b>Purification</b>	Protein A purified
<b>Buffer</b>	PBS, 50% glycerol, 0.05% Proclin 300, 0.05% protein protectant.

### Applications

### Recommended Dilution

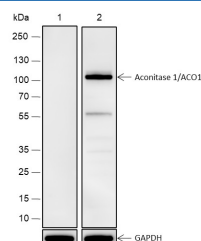
<b>WB</b>	1:500-1:2000
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### Data



Western Blot with Aconitase 1/ACO1 Monoclonal Antibody at dilution of 1:2000. Lane 1: Mouse kidney, Lane 2: Rat kidney

**Observed-MW:105 kDa**  
**Calculated-MW:98 kDa**



Western Blot with Aconitase 1/ACO1 Monoclonal Antibody at dilution of 1:2000. Lane 1: Human liver tissue lysate, the Aconitase1/ACO1 Rabbit mAb pre-adsorbed with 3 $\mu$ M of the synthetic peptides, Lane 2: Human liver tissue lysate, the Aconitase 1/ACO1 Rabbit mAb with no peptide blocking.

**Observed-MW:105 kDa**  
**Calculated-MW:98 kDa**

### Preparation & Storage

<b>Storage</b>	Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.
<b>Shipping</b>	Ice bag

### Background

Aconitase 1 is a bifunctional, cytosolic protein that functions as an essential enzyme in the TCA cycle and interacts with mRNA to control the levels of iron inside cells. When cellular iron levels are high, this protein binds to a 4Fe-4S cluster and functions as an aconitase. Aconitases are iron-sulfur proteins that function to catalyze the conversion of citrate to isocitrate. When cellular iron levels are low, the protein binds to iron-responsive elements (IREs), which are stem-loop structures found in the 5' UTR of ferritin mRNA, and in the 3' UTR of transferrin receptor mRNA.

### For Research Use Only

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