

# Anti-Aconitase 2 Picoband Antibody

Catalog # ABO12658

## Product Information

---

|                          |                                                                                                                           |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------|
| <b>Application</b>       | WB                                                                                                                        |
| <b>Primary Accession</b> | <a href="#">Q99798</a>                                                                                                    |
| <b>Host</b>              | Rabbit                                                                                                                    |
| <b>Reactivity</b>        | Human, Mouse, Rat                                                                                                         |
| <b>Clonality</b>         | Polyclonal                                                                                                                |
| <b>Format</b>            | Lyophilized                                                                                                               |
| <b>Description</b>       | Rabbit IgG polyclonal antibody for Aconitate hydratase, mitochondrial(ACO2) detection. Tested with WB in Human;Mouse;Rat. |
| <b>Reconstitution</b>    | Add 0.2ml of distilled water will yield a concentration of 500ug/ml.                                                      |

## Additional Information

---

|                                 |                                                                                                                                                                                            |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene ID</b>                  | 50                                                                                                                                                                                         |
| <b>Other Names</b>              | Aconitate hydratase, mitochondrial, Aconitase, 4.2.1.3, Citrate hydro-lyase, ACO2                                                                                                          |
| <b>Calculated MW</b>            | 85425                                                                                                                                                                                      |
| <b>Application Details</b>      | Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat                                                                                                                                             |
| <b>Subcellular Localization</b> | Mitochondrion .                                                                                                                                                                            |
| <b>Source</b>                   | Eukaryota                                                                                                                                                                                  |
| <b>Protein Name</b>             | Aconitate hydratase, mitochondrial                                                                                                                                                         |
| <b>Contents</b>                 | Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.                                                                                                                        |
| <b>Immunogen</b>                | A synthetic peptide corresponding to a sequence at the C-terminus of human Aconitase 2 (561-596aa TSQRLQLLEPFDKWDGKDLEDLQILIKVKGKCTTDH), identical to the related mouse and rat sequences. |
| <b>Purification</b>             | Immunogen affinity purified.                                                                                                                                                               |
| <b>Cross Reactivity</b>         | No cross reactivity with other proteins                                                                                                                                                    |
| <b>Storage</b>                  | At -20° C for one year. After r° Constitution, at 4° C for one month. It° Can also be aliquotted and stored frozen at -20° C for a longer time.Avoid repeated freezing and thawing.        |

## Protein Information

---

|                          |                                                                          |
|--------------------------|--------------------------------------------------------------------------|
| <b>Name</b>              | ACO2                                                                     |
| <b>Function</b>          | Catalyzes the isomerization of citrate to isocitrate via cis- aconitate. |
| <b>Cellular Location</b> | Mitochondrion {ECO:0000250   UniProtKB:P16276}.                          |

## Background

---

Aconitase 2, mitochondrial is a protein that in humans is encoded by the ACO2 gene. The protein encoded by this gene belongs to the aconitase/IPM isomerase family. It is an enzyme that catalyzes the interconversion of citrate to isocitrate via cis-aconitate in the second step of the TCA cycle. This protein is encoded in the nucleus and functions in the mitochondrion. It was found to be one of the mitochondrial matrix proteins that are preferentially degraded by the serine protease 15 (PRSS15), also known as Lon protease, after oxidative modification.

## Images

---



Western blot analysis of Aconitase 2 expression in rat skeletal muscle extract (lane 1), mouse brain extract (lane 2) and HELA whole cell lysates (lane 3). Aconitase 2 at 85KD was detected using rabbit anti- Aconitase 2 Antigen Affinity purified polyclonal antibody (Catalog # ABO12658) at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL) method .

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.