

## Rabbit ACO1 Polyclonal Antibody | anti-ACO1 antibody

ACO1 Polyclonal Antibody

|                               |                       |                                        |                                                           |
|-------------------------------|-----------------------|----------------------------------------|-----------------------------------------------------------|
| CATALOG #<br><b>AAA280395</b> | HOST<br><b>Rabbit</b> | REACTIVITY<br><b>Human, Mouse, Rat</b> | APPLICATIONS<br><b>Immunohistochemistry, Western Blot</b> |
|-------------------------------|-----------------------|----------------------------------------|-----------------------------------------------------------|

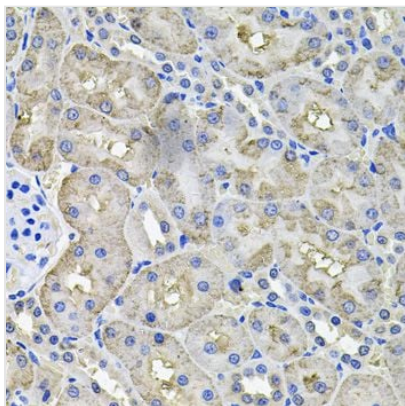
### PRODUCT SYNONYMS

ACO1; Polyclonal Antibody; ACO1 Polyclonal Antibody; anti-ACO1 antibody

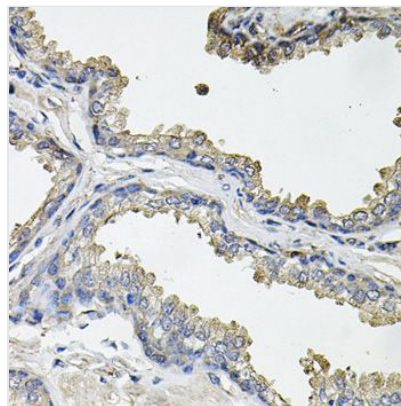
### PRODUCT SPECIFICATIONS

|                                                |                                                                                                                 |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Host                                           | Rabbit                                                                                                          |
| Reactivity                                     | Human, Mouse, Rat                                                                                               |
| Clonality                                      | Polyclonal                                                                                                      |
| Isotype                                        | IgG                                                                                                             |
| Purity/Purification                            | Affinity Purification                                                                                           |
| Sequence Length                                | 889                                                                                                             |
| Applicable Applications for anti-ACO1 antibody | IHC (Immunohistochemistry), WB (Western Blot)                                                                   |
| Route                                          | Synthetic Peptide                                                                                               |
| Immunogen                                      | A synthetic peptide of human ACO1                                                                               |
| Preparation and Storage                        | Store at -20 degree C. Avoid freeze / thaw cycles.<br>Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3. |

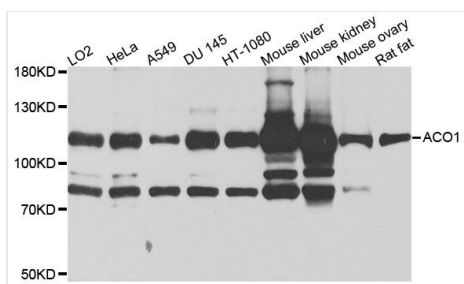
### IMAGES


**IHC (Immunohistochemistry)**

Immunohistochemistry of paraffin-embedded rat kidney using ACO1 antibody at dilution of 1:100 (40x lens).


**IHC (Immunohistochemistry)**

Immunohistochemistry of paraffin-embedded human prostate using ACO1 antibody at dilution of 1:100 (40x lens).



#### WB (Western Blot)

Western blot analysis of extracts of various cell lines, using ACO1 antibody at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit. Exposure time: 5s.

## ADDITIONAL INFORMATION

### Related Product Information for anti-ACO1 antibody

The protein encoded by this gene 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. When the protein binds to IRE, it results in repression of translation of ferritin mRNA, and inhibition of degradation of the otherwise rapidly degraded transferrin receptor mRNA. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. Alternative splicing results in multiple transcript variants

## NCBI AND UNIPROT INFORMATION

|                                  |                                          |
|----------------------------------|------------------------------------------|
| NCBI GI #                        | 507834063                                |
| NCBI GeneID                      | 48                                       |
| NCBI Accession #                 | NP_001265281.1                           |
| NCBI GenBank Nucleotide #        | NM_001278352.1                           |
| UniProt Accession #              | P21399; Q14652; Q5VZA7; D3DRK7           |
| Molecular Weight                 | 98kDa                                    |
| NCBI Official Full Name          | cytoplasmic aconitate hydratase          |
| NCBI Official Synonym Full Names | aconitase 1, soluble                     |
| NCBI Official Symbol             | ACO1                                     |
| NCBI Official Synonym Symbols    | IRP1; ACONS; HEL60; IREB1; IREBP; IREBP1 |
| NCBI Protein Information         | cytoplasmic aconitate hydratase          |
| UniProt Protein Name             | Cytoplasmic aconitate hydratase          |
| UniProt Gene Name                | <b>ACO1</b>                              |
| UniProt Synonym Gene Names       | IREB1; Aconitase; IRP1; IRE-BP 1         |
| UniProt Entry Name               | ACOC_HUMAN                               |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/aco1-antibody-immunohistochemistry-western-blot-elisa/280395>