003216589045 (EU)
0203393 8531 (UK)
(408)780-0908 (US)
info@gentaur.com
www.caslab.com

ACO1 Polyclonal Antibody

Cat #: G-AB-11912

Host: Rabbit **Reactivity:** Human, Mouse, Rat

Isotype: IgG **Clonality:**

Overview:
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

Gene ID: 48

Accession #:

Immunogen: Recombinant fusion protein of human ACO1 (NP_002188.1).

Conjugation: Unconjugated

Swissprot: P21399

Calculated Molecular Weight:

Observed Molecular Weight:

Concentration: 1 mg/mL

Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3

Purification Method: Affinity purification

Application: IHC

Dilution: IHC 1:50-1:100

Storage: Store at -20°C. Avoid freeze / thaw cycles.