

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Product datasheet for TA500841

Aconitase 2 (ACO2) Mouse Monoclonal Antibody [Clone ID: OTI7A11]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI7A11
Applications: FC, IF, WB

Recommend Dilution: WB 1:2000, IF 1:100, Flow 1:100

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human ACO2 (NP_001089) produced in HEK293T

cell

Formulation: PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

Concentration: 0.78 mg/ml

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Predicted Protein Size: 85.4 kDa **Gene Name:** aconitase 2

Database Link: NP 001089 Entrez Gene 50 Human

Background: 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.

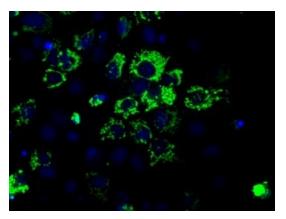
Synonyms: ACONM; HEL-S-284; ICRD; OCA8; OPA9

Protein Pathways: Citrate cycle (TCA cycle), Glyoxylate and dicarboxylate metabolism, Metabolic pathways

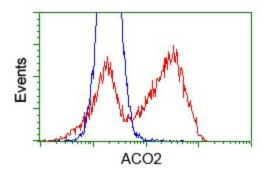




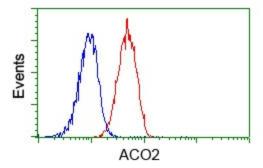
Product images:



Anti-ACO2 mouse monoclonal antibody (TA500841) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY ACO2 ([RC204307]).

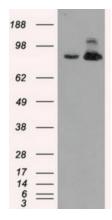


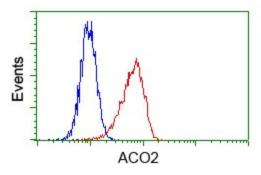
HEK293T cells transfected with either pCMV6-ENTRY ACO2 ([RC204307]) (Red) or empty vector control plasmid (Blue) were immunostained with anti-ACO2 mouse monoclonal (TA500841), and then analyzed by flow cytometry.



Flow cytometric analysis of Jurkat cells, using anti-ACO2 antibody (TA500841), (Red) compared to a nonspecific negative control antibody ([TA50011]) (Blue).







HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY ACO2 ([RC204307], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ACO2. Positive lysates [LY400442] (100ug) and [LC400442] (20ug) can be purchased separately from OriGene.

Flow cytometric analysis of Hela cells, using anti-ACO2 antibody (TA500841), (Red) compared to a nonspecific negative control antibody ([TA50011]) (Blue).