

## Product datasheet for TA500824M

#### OriGene Technologies, Inc.

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

### Aconitase 2 (ACO2) Mouse Monoclonal Antibody [Clone ID: OTI3G8]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI3G8

**Applications:** IF, IHC, WB

Recommended Dilution: WB 1:2000, IHC 1:50, IF 1:100

Reactivity: Human, Mouse, Rat

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:** 0.9 mg/ml

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

(protein A/G)

Conjugation: Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

Predicted Protein Size: 85.4 kDa

Gene Name: aconitase 2

Database Link: NP 001089

Entrez Gene 11429 MouseEntrez Gene 79250 RatEntrez Gene 50 Human

099798

**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.

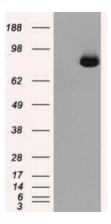




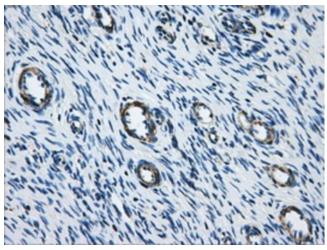
Synonyms: ACONM; HEL-S-284; ICRD; OCA8; OPA9

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

# **Product images:**

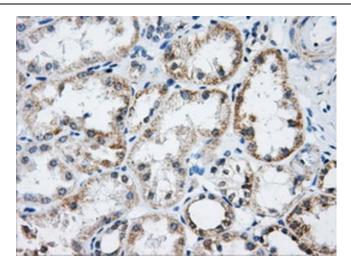


HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ACO2 (Cat# [RC204307], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ACO2(Cat# [TA500824]). Positive lysates [LY400442] (100ug) and [LC400442] (20ug) can be purchased separately from OriGene.

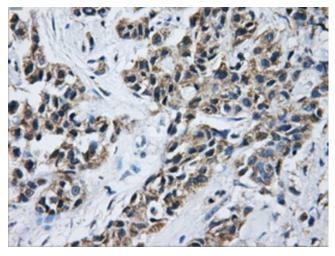


Immunohistochemical staining of paraffinembedded Ovary tissue within the normal limits using anti-ACO2mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

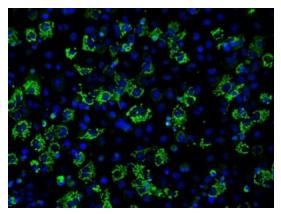




Immunohistochemical staining of paraffinembedded Kidney tissue within the normal limits using anti-ACO2mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

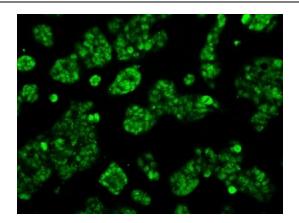


Immunohistochemical staining of paraffinembedded Adenocarcinoma of breast tissue using anti-ACO2 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

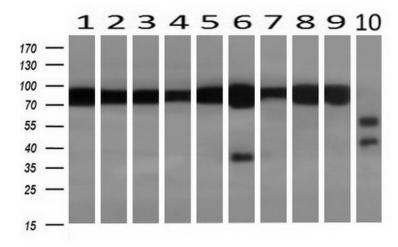


Anti-ACO2 mouse monoclonal antibody ([TA500824]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY ACO2 ([RC204307]).





Immunofluorescent staining of HepG2 cells using anti-ACO2 mouse monoclonal antibody ([TA500824]).



Western blot analysis of extracts (10ug) from 10 Human tissue by using anti-ACO2 monoclonal antibody at 1:200 (1: Testis; 2: Omentum; 3: Uterus; 4: Breast; 5: Brain; 6: Liver; 7: Ovary; 8: Thyroid gland; 9: colon;10: spleen).