

Store at -20C  
#6571ACO2 (D6D9) XP<sup>®</sup> Rabbit mAb

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<b>Applications:</b> W, IP, IF-IC	<b>Reactivity:</b> H M R Hm Mk	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 85	<b>Source/Isotype:</b> Rabbit IgG	<b>UniProt ID:</b> #Q99798	<b>Entrez-Gene Id:</b> 50
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### Product Usage Information

#### Application

Western Blotting  
Immunoprecipitation  
Immunofluorescence (Immunocytochemistry)

#### Dilution

1:1000  
1:50  
1:200

### Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

### Specificity/Sensitivity

ACO2 (D6D9) XP<sup>®</sup> Rabbit mAb recognizes endogenous levels of total ACO2 protein.

### Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly540 of human ACO2 protein.

### Background

Aconitase 2 (ACO2) catalyzes the conversion of citrate to isocitrate via cis-aconitate in the second step of the tricarboxylic acid (TCA) cycle (1,2). ACO2 is also an important regulator of iron homeostasis within cells (1-4). In addition, research studies have shown that this enzyme is deficient in the mitochondrial disease Friedreich's Ataxia (4,5).

### Background References

- Gille, G. and Reichmann, H. (2011) *J Neural Transm* 118, 349-59.
- Mirel, D.B. et al. (1998) *Gene* 213, 205-18.
- Myers, C.R. et al. (2010) *Free Radic Biol Med* 49, 1903-15.
- Rötig, A. et al. (1997) *Nat Genet* 17, 215-7.
- Ye, H. and Rouault, T.A. (2010) *Biochemistry* 49, 4945-56.

### Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

### Western Blot Buffer

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

### Applications Key

**W:** Western Blotting **IP:** Immunoprecipitation **IF-IC:** Immunofluorescence (Immunocytochemistry)

### Cross-Reactivity Key

**H:** Human **M:** Mouse **R:** Rat **Hm:** Hamster **Mk:** Monkey

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