

#6571 Store at -20C

# ACO2 (D6D9) XP® Rabbit mAb



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

## 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® 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

1. Gille, G. and Reichmann, H. (2011) *J Neural Transm* 118, 349-59.
2. Mirel, D.B. et al. (1998) *Gene* 213, 205-18.
3. Myers, C.R. et al. (2010) *Free Radic Biol Med* 49, 1903-15.
4. Rötig, A. et al. (1997) *Nat Genet* 17, 215-7.
5. 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

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

## Cross-Reactivity Key

**H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster  
**X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse  
**GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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