

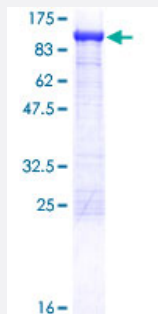
Full-Length

ACO2 (Human) Recombinant Protein (P01)

Catalog # H00000050-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human ACO2 full-length ORF (NP_001089.1, 1 a.a. - 780 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MAPYSLLVTRLQKALGVRQYHVASVLCQRAKVAMSHFEPNEYHYDLLEKNINVRKRLNRPLTLSE
KIVYGHLDPPASQEIERGKSYLRLRPDRVAMQDATAQMAMQLFISSGLSKVAVPSTIHCDHLIEAQ
VGGEKDLRRAKDINQEVYNFLATAGAKYGVGFWKPGSGIIHQIILENYAYPGVLLIGTDSHTPNGGG
LGGICIGVGGADAVDVMAGIPWELKCPKVIGVCLTGLSGWSSPKDVILKVAGILTVKGGTGAMEY
HGPVDSISCTGMATICNMGAIEGATTSVFPYNHRMCKYLSKTGREDIANLADEFKDHLVPDPGC
HYDQLIEINLSELKPHINGPFTPDLAHPVAEVGKVAEKEGWPLDIRVGLIGSCTNSSYEDMGRSAA
VAKQALAHGLKCKSQFTITPGSEQIRATIERDGYAQILRDLGGMLANACGPCIGQWDRKDIKKGEK
NTVTSYNRNFTGRNDANPETHAFVTSPEIVTALAIAAGTLKFNPETDYLGTGDKKFRLEAPDADEL
PKGEFDPGQDQYQHPPKDSSGQHVDVSPTSQRLQLLEPFDKWDGKDLEDLQILIKVKGKCTTDHI
SAAGPWLKFRGHLDNISNNLLIGAINIENGKANSVRNAVQTQFGPVPDTARYYKKHGIRWVIGDEN
YGESSREHAALPRHLGGRITKSFARIHETNLKKQGLLPLTFADPADYNKIHPVDKLTIQGLKDF
TPGKPLKCIKHPNGTQETILLNHTFNETQIEWFRAGSALNRMKELQQ

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

111.8

Interspecies Antigen Sequence

Mouse (97); Rat (96)

Preparation Method

[in vitro wheat germ expression system](#)

Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — ACO2

Entrez GeneID	50
GeneBank Accession#	NM_001098.2
Protein Accession#	NP_001089.1
Gene Name	ACO2
Gene Alias	ACONM, MGC20605, MGC33908
Gene Description	aconitase 2, mitochondrial
Omim ID	100850
Gene Ontology	Hyperlink
Gene Summary	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. [provided by RefSeq]

Other Designations

OTTHUMP00000042146|OTTHUMP00000165920|aconitase 2|aconitate hydratase|citrate hydro-
lyase

Pathway

- [Biosynthesis of alkaloids derived from histidine and purine](#)
- [Biosynthesis of alkaloids derived from ornithine](#)
- [Biosynthesis of alkaloids derived from shikimate pathway](#)
- [Biosynthesis of alkaloids derived from terpenoid and polyketide](#)
- [Biosynthesis of phenylpropanoids](#)
- [Biosynthesis of plant hormones](#)
- [Biosynthesis of terpenoids and steroids](#)
- [Citrate cycle \(TCA cycle\)](#)
- [Glyoxylate and dicarboxylate metabolism](#)
- [Metabolic pathways](#)
- [Reductive carboxylate cycle \(CO2 fixation\)](#)