

## Recombinant Mouse Mtar2 Protein, Myc/DDK-tagged

Cat. No. Mtar2-3955M    Lot. No. (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Purified recombinant protein of mouse full-length mitochondrial amidoxime reducing component 2 (Mtar2), with C-terminal MYC/DDK tag, expressed in HEK293T cells.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Species</b>          | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Source</b>           | HEK293                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Description</b>      | Catalyzes the reduction of N-oxygenated molecules, acting as a counterpart of cytochrome P450 and flavin-containing monooxygenases in metabolic cycles. As a component of prodrug-converting system, reduces a multitude of N-hydroxylated prodrugs particularly amidoximes, leading to increased drug bioavailability. May be involved in mitochondrial N(omega)-hydroxy-L-arginine (NOHA) reduction, regulating endogenous nitric oxide levels and biosynthesis. Postulated to cleave the N-OH bond of N-hydroxylated substrates in concert with electron transfer from NADH to cytochrome b5 reductase then to cytochrome b5, the ultimate electron donor that primes the active site for substrate reduction. |
| <b>Molecular Mass</b>   | 38.6 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Purity</b>           | > 80% as determined by SDS-PAGE and Coomassie blue staining                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Stability</b>        | Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Storage</b>          | Store at -80 centigrade after receiving vials.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

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**Concentration** >50 µg/mL as determined by microplate BCA method

**Storage Buffer** 25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10% glycerol.

## GENE INFORMATION

**Gene Name** Mtarc2 mitochondrial amidoxime reducing component 2 [ Mus musculus (house mouse) ]

**Official Symbol** Mtarc2

**Synonyms** Mtarc2; mitochondrial amidoxime reducing component 2; Mar; Mos; Marc2; Mosc2; mARC1; 2810484M10Rik; mitochondrial amidoxime reducing component 2; MOCO sulphurase C-terminal domain containing 2; MOSC domain-containing protein 2, mitochondrial; moco sulfurase C-terminal domain-containing protein 2; molybdenum cofactor sulfurase C-terminal domain-containing protein 2

**Gene ID** 67247

**mRNA Refseq** NM\_133684

**Protein Refseq** NP\_598445

**UniProt ID** Q922Q1

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