
DMGO (Dimethylglycine oxidase) Arthrobacter globiformis Recombinant, His-tag E.coli

Cat.NO.: TP01891

3th Edition

Synonyms:N,N-dimethylglycine oxidase, DMG

Description:Dimethylglycine oxidase (DMGO) is a covalent flavoenzyme from *Arthrobacter globiformis* that catalyzes the oxidative demethylation of dimethylglycine to yield sarcosine, formaldehyde, and hydrogen peroxide. The N-terminal region binds FAD covalently so it is yellowish. Recombinant DMGO originated from *Arthrobacter globiformis*, fused to His tag at N-terminus, was expressed in *E.coli* and purified by using conventional chromatography techniques.

Form:Liquid. In 20 mM Tris-HCl buffer (pH 8.0) containing 20% glycerol

Molecular Weight:92.1kDa (850aa), confirmed by MALDI-TOF

Sequences:

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MGSSHHHHHSSGLVPRGSHMASTPRIVIIGAGIVGTNLADELVTRGWNNITVLDQGPLNMPGGSTSHAPGLVFQT  
NPSKTMASFAKYTVEKLLSLTEDGVSCFNQVGGLEVATTETRLADLKRKLGAAAAWGIEGRLLSPAECQELYPLLD  
GENILGGLHVPDGLASAAARAVQLLIKRTESAGVTYRGSTTVTGIEQSGGRVTGVQTADGVIPADIVVSCAGFWGAK  
IGAMIGMAVPLLPLAHQYVKTTTPVPAQQGRNDQPNGARLPILRHQDQDLYYREHGDRYGIGSYAHRPMPVDVDTL  
GAYAPETVSEHHMPSRLDFTLEDFLPAWEATKQLLPALADSEIEDGFNGIFSFTPDGGPLLGESKELDGFYVAEAV  
WVTHSAGVAKAMAELLTGRSETDLGECDIRFEDVQLTPEYVSETSQQNFVEIYDVLHPLQPRLSRNLRVSPFH  
ARHKELGAFFLEAGGWERPYWFEANAALLKEMPAEWLPPARDAWSGMFSSPIAAAAEAWKTRTAVAMYDMTPLKR  
LEVSGPGALKLLQELTTADLAKKPGAVTYTLLLDHAGGVRSDITVARLSEDTFQLGANGNIDTAYFERAARHQTQSG  
SATDWVQVRDTTGGTCCIGLWGPLARDLVSKVSDDDFTNDGLKYFRAKNVIGGIPVTAMRLSYVGELGWELYTS  
ADNGQRLWDALWQAGQPFVIAAGRAAFSSLRLEKGYRSWGTDMTTEHDPFEAGLGFVAVKMAKESFIGKGALEG  
RTEEASARRLRCLTIDDGRSIVLGKEPVFYKEQAVGYVTSAAAYGYTVAKPIAYSYPGTVSVGDSVDIEYFGRRITAT  
VTEDPLYDPKMTRLRG
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Purity:> 95% by HPLC

Concentration:1 mg/ml (determined by Bradford assay)

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.