

Apo-Myoglobin

Sperm Whale, Recombinant

Expressed in *E. coli*

Cat. No. CRP0852

Lot. No. (See product label)

PRODUCT INFORMATION

Description: Apo-myoglobin contains no heme groups that facilitate the transport of molecular oxygen by combining with molecular oxygen to form oxymyoglobins. Sperm whale apo-myoglobin is expressed in *E. coli*.

Background: This gene encodes a member of the globin superfamily and is expressed in skeletal and cardiac muscles. The encoded protein is a haemoprotein contributing to intracellular oxygen storage and transcellular facilitated diffusion of oxygen. At least three alternatively spliced transcript variants encoding the same protein have been reported.

M. W. : 17,180 Da

Recombinant: Expressed in *E. coli*

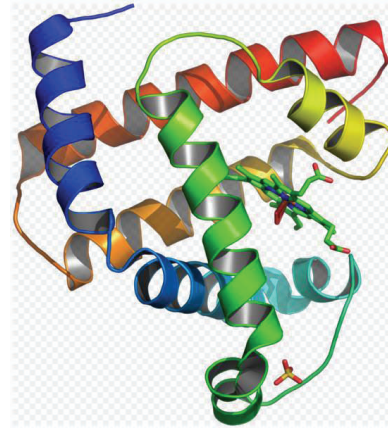
Purity: >95% as determined by SDS-PAGE.

Storage buffer: Liquid. In 30 mM Acetic Acid.

REFERENCES

1. Takano, T. Structure of myoglobin refined at 2.0 Å resolution. II. Structure of deoxymyoglobin from sperm whale. *J. Mol. Biol.* 1977; 110: 569–584.
2. George A. Ordway and Daniel J. Garry. Myoglobin: an essential hemoprotein in striated muscle. *Journal of Experimental Biology* 2004; 207: 3441–3446.
3. Barry, A., et al. High-level expression of sperm whale myoglobin in *Escherichia coli*. *Proc. Natl. Acad. Sci. USA* 1987; 84(24): 8961–8965.
4. Morgera, Hans H. Neumayer and Rinaldo Bellomo. Myoglobin clearance by super high-flux hemofiltration in a case of severe rhabdomyolysis: a case report. *Critical Care* 2005; 9: R90–R95.

FOR RESEARCH USE ONLY



Model of helical domains in myoglobin.^[1]

GENE INFORMATION

Gene Name: [MB](#)

Gene Alias: MGC13548; PVALB; Myoglobin; myoglobin

mRNA Refseq: [NM_005368.2](#)

Protein Refseq: [NP_005359.1](#)

MIM: [160000](#)

GeneID: [4151](#)

Uniprot ID: [P02144](#)

Function: heme binding, iron ion binding, metal ion binding, oxygen binding, oxygen transporter activity.

Process: enuclease erythrocyte differentiation, heart development, oxygen transport, response to hypoxia, transport.

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