

Mouse Peroxiredoxin 1 / PRDX1 Protein (His Tag)

Catalog Number: 50552-M08E



Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

MSP23; NkefA; OSF-3; OSF3; PAG; Paga; Prdxl; prx1; Prxl; Tdpx2; TDX2; TPxA

Protein Construction:

A DNA sequence encoding the mouse PRDX1 (P35700) (Met 1-Lys 199) was expressed, with a C-terminal polyhistidine tag.

Source: Mouse

Expression Host: E. coli

QC Testing

Purity: > 85 % as determined by SDS-PAGE

Endotoxin:

Please contact us for more information.

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Met 1

Molecular Mass:

The recombinant mouse PRDX1 comprises 209 amino acids and has a calculated molecular mass of 23.5 kDa. The recombinant protein migrates as an approximately 27 kDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, 10% glycerol, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

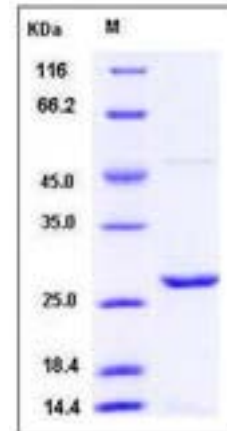
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Peroxiredoxin-1, also known as Thioredoxin peroxidase 2, Natural killer cell-enhancing factor A, PRDX1, and PAGA, is a member of the ahpC/TSA family. Peroxiredoxin-1 is constitutively expressed in most human cells. It is induced to higher levels upon serum stimulation in untransformed and transformed cells. Peroxiredoxins (PRDXs) are a family of antioxidant enzymes that are also known as scavengers of peroxide in mammalian cells. The overexpression of Peroxiredoxin-1, which is one of the peroxiredoxins that is a ubiquitously expressed protein, was related to a poor prognosis in several types of human cancers. Peroxiredoxin-1 is involved in redox regulation of the cell. It reduces peroxides with reducing equivalents provided through the thioredoxin system but not from glutaredoxin and may play an important role in eliminating peroxides generated during metabolism. Peroxiredoxin-1 might participate in the signaling cascades of growth factors and tumor necrosis factor- α by regulating the intracellular concentrations of H₂O₂. The reduced Peroxiredoxin-1 expression is an important factor in esophageal squamous cancer progression and could serve as a useful prognostic marker.

References

1. Neumann, CA. et al., 2003, Nature 424 (6948): 561-5
2. Gisin, J. et al., 2005, J Clin Pathol. 58 (11): 1229-31.
3. Hoshino, I. et al., 2007, Oncol Rep. 18 (4): 867-71.

Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

For US Customer: Fax: 267-657-0217 • Tel: 215-583-7898

Global Customer: Fax :+86-10-5862-8288 • Tel:+86-400-890-9989 • <http://www.sinobiological.com>