PRDX5/Peroxiredoxin-5 Protein, Mouse (His)

Cat. No.:	HY-P73375
Synonyms:	Peroxiredoxin-5;PLP;Prx-V;Prdx5;AOEB166
Species:	Mouse
Source:	E. coli
Accession:	P99029-1 (M49-L210)
Gene ID:	54683
Molecular Weight:	Approximately 19 kDa

PROPERTIES

AA Sequence	M A P I K V G D A I P S V E V F E G E P G K K V N L A E L F K G K K G V L F G V P G A F T P G C S K T H L P G F V E Q A G A L K A K G A Q V V A C L S V N D V F V I E E W G R A H Q A E G K V R L L A D P T G A F G K A T D L L L D D S L V S L F G N R R L K R F S M V I D N G I V K A L N V E P D G T G L T C S L A P N I L S Q L
Biological Activity	The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.22 μm filtered solution of PBS, pH 6.5, 8% trehalose.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O.
Storage & Stability	Stored at -20°C for 2 years from date of receipt. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	PRDX5/Peroxiredoxin-5 Protein operates as a thiol-specific peroxidase, catalyzing the reduction of hydrogen peroxide and organic hydroperoxides to water and alcohols, respectively. This protein plays a crucial role in cellular protection against oxidative stress by detoxifying various peroxides, showcasing its significance in maintaining cellular redox balance. Additionally, PRDX5 acts as a sensor of hydrogen peroxide-mediated signaling events, suggesting its involvement in modulating cellular responses to oxidative stress. The dual functionality of PRDX5 underscores its importance in cellular defense mechanisms and its potential contribution to regulatory pathways associated with redox signaling.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite F, Monmouth Junction, NJ 08852, USA