Recombinant Human Peroxiredoxin 5/PRDX5 Protein (His Tag)

Catalog Number: PKSH032885

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

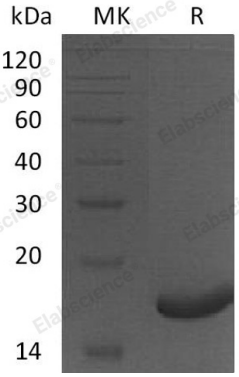
Description

Species	Human
Source	HEK293 Cells-derived Human Peroxiredoxin 5;PRDX5 protein Met53-Leu214, with an N-terminal His
Calculated MW	17.9 kDa
Observed MW	17 kDa
Accession	P30044
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Peroxisomes are essential organelles that participate in multiple important metabolic processes, including the β-oxidation of fatty acids, plasmalogen synthesis, and the metabolism of reactive oxygen species (ROS). Peroxiredoxins is overexpressed in breast cancer tissues to a great extent suggesting that they has a proliferative effect and may be related to cancer development or progression. Peroxiredoxin 5 (PRDX5) is a thioredoxin peroxidase that belongs to the atypical 2-Cys class of the TSA/ahpC family of peroxiredoxins. PRDX5 is a widely expressed mitochondrial antioxidant enzyme that reduces hydrogen peroxide, alkyl hydroperoxides, and peroxynitrite. In human cells, this enzyme is present in the cytosol, mitochondria, peroxisomes, and nucleus.

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