

Recombinant Human NQO1/DT-diaphorase Protein (His Tag)

Catalog No. PKSH030925

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

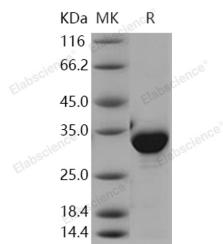
Description

Synonyms	DHQU;DIA4;DTD;NMOR1;NMORI;QR1
Species	Human
Expression Host	E.coli
Sequence	Met 1-Lys274
Accession	P15559-1
Calculated Molecular Weight	33 kDa
Observed molecular weight	33 kDa
Tag	N-His
Bioactivity	Not validated for activity

Properties

Purity	> 90 % as determined by reducing SDS-PAGE.
Endotoxin	Please contact us for more information.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 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



> 90 % as determined by reducing SDS-PAGE.

Background

NQO1 gene is a member of the NAD(P)H dehydrogenase (quinone) family and encodes a cytoplasmic 2-electron reductase. NQO1 forms homodimers and reduces quinones to hydroquinones. NQO1's enzymatic activity prevents the one

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electron reduction of quinones that results in the production of radical species. Mutations in NQO1 gene have been associated with tardive dyskinesia (TD), an increased risk of hematotoxicity after exposure to benzene, and susceptibility to various forms of cancer. Altered expression of NQO1 has been seen in many tumors and is also associated with Alzheimer's disease (AD). Alternate transcriptional splice variants, encoding different isoforms, have been characterized. Recent pharmacological research suggests feasibility of genotype-directed redox chemotherapeutic intervention targeting NQO1 breast cancer, a common missense genotype encoding a functionally impaired NQO1 protein.