



Recombinant Protein Technical Manual
Recombinant Human NQO1/DT-diaphorase Protein
(His Tag)
RPES3988

Product Data:

Product SKU: RPES3988

Size: 10µg

Species: Human

Expression host: E. coli

Uniprot: P15559

Protein Information:

Molecular Mass: 33 kDa

AP Molecular Mass: 33 kDa

Tag: N-His

Bio-activity:

Purity: > 90 % as determined by reducing SDS-PAGE.

Endotoxin: Please contact us for more information.

Storage: 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

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: DHQU;DIA4;DTD;NMOR1;NMORI;QR1

Immunogen Information:

Sequence: Met 1-Lys274

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 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.