

**Recombinant Human NQO1 / DT-diaphorase Protein (His tag)**

**Cat.NO.: TP08022**

3th Edition

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

**Description:**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.

**Form:**PBS

**Molecular Weight:**33 kDa

**Sequences:**Met 1-Lys274

**Purity:**> 95% by HPLC

**Concentration:**

**Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)

**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.