



# Recombinant Rat NAD (P)H dehydrogenase [quinone] 1 (Nqo1)

<b>Product Code</b>	CSB-EP016039RA-B
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P05982
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Rattus norvegicus (Rat)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	AVRRALIVL AHAERTSFNY AMKEAAVEAL KKKGWEEVES DLYAMNFNPL ISRNDITGEP KDSENFQYPV ESSLAYKEGR LSPDIVAEQK KLEAADLVIF QFPLYWFGVP AILKGWFERV LVAGFAYTYA TMYDKGPFQN KKTLLSITTG GSGSMYSLQG VHGD MNVILW PIQSGILRFC GFQVLEPQLV YSIGHTPPDA RVQVLEGWKK RLETVWEESP LYFAPSSLFD LNFQAGFLK KEVQEEQKKN KFGLSVGHHL GKSIPADNQI KARK
<b>Source</b>	E.coli
<b>Target Names</b>	Nqo1
<b>Protein Names</b>	Recommended name: NAD(P)H dehydrogenase [quinone] 1 EC= 1.6.5.2 Alternative name(s): Azoreductase DT-diaphorase Short name= DTD Menadione reductase NAD(P)H:quinone oxidoreductase 1 Phylloquinone reductase Quinone
<b>Expression Region</b>	2-274
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full Length of Mature Protein
<b>Target Details</b>	This gene is a member of the NAD(P)H dehydrogenase (quinone) family and encodes a cytoplasmic 2-electron reductase. This FAD-binding protein forms homodimers and reduces quinones to hydroquinones. This protein's enzymatic activity prevents the one electron reduction of quinones that results in the production of radical species. Mutations in this 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 this protein 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.
<b>Reconstitution</b>	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final



concentration of glycerol is 50%. Customers could use it as reference.

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**Shelf Life**

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.

Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.