

NFNB, bacterial recombinant

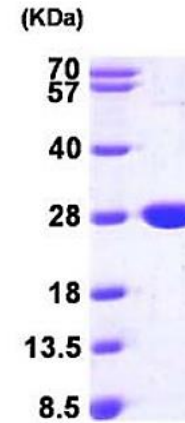
CATALOG #:	7830-100	100 µg
ALTERNATE NAMES:	Dihydropteridine reductase, NAD(P)H-dependent, oxygen-insensitive, dprA, nfsB, nfsI, ntr.	
SOURCE:	E. Coli	
PURITY:	> 95% by SDS - PAGE	
MOL. WEIGHT:	26.0 kDa (237 aa, 1-217 aa + His Tag)	
FORM:	Liquid	
FORMULATION:	1 mg/ml solution in 20 mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 1 mM DTT and 50 mM NaCl	

STORAGE CONDITIONS: 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.

DESCRIPTION: NFNB, also known as NFSB, shows the ability to reduce quinines. This protein is an enzyme for activating prodrugs in antibody directed enzyme prodrug therapy. It also capable of reducing nitrofurazone, quinones and the anti-tumor agent CB1954 (5-(aziridin-1-yl)-2, 4-dinitrobenzamide). The reduction of CB1954 results in the generation of cytotoxic species. Recombinant E.coli NFNB protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

AMINO ACID SEQUENCE: MGSSHHHHHH SSGLVPRGSH MDIISVALKR HSTKAFDASK KLTPEQAEQI KTLQYSPSS TNSQPWHFIV ASTEEGKARV AKSAAGNYVF NERKMLDASH VVVFCAKTAM DDVWLKLVVD QEDADGRFAT PEAKAANDKG RKFFADMHRK DLHDDAEWMA KQVYLVGNF LLGVAALGLD AVPIEGFDAA ILDAEFGLE KGYTSLVVVP VGHHSVEDFN ATLPKSRLPQ NITLTEV

BIOLOGICAL ACTIVITY: Specific activity: > 2 units/ml One unit will oxidize 1.0 µmole of b-NADH to b-NAD with 6.7-Dimethyldihydropterine (quinonoid isomer) as the non-nucleotide substrate per minute at pH 7.2 at 25°C



15% SDS-PAGE (3µg)

Human Recombinant NFNB

RELATED PRODUCTS:

- Proteins and Enzymes

FOR RESEARCH USE ONLY! Not to be used in humans.