

Recombinant human NMRAL1 protein

Catalog Number: ATGP1586

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-299aa

UniProt No.

Q9HBL8

NCBI Accession No.

NP_065728

Alternative Names

NmrA-like family domain containing 1, HSCARG, SDR48A1

PRODUCT SPECIFICATION

Molecular Weight

35.9 kDa (323aa) confirmed by MALDI-TOF

Concentration

0.5mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 20% glycerol, 0.15M NaCl

Purity

> 95% by SDS-PAGE

Tag

His-Tag

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

NMRAL1 is a redox sensor protein that undergoes restructuring and subcellular redistribution in response to changes in intracellular NADPH/NADP⁺ levels. At low NADPH concentrations the protein is found mainly as a monomer, and binds argininosuccinate synthase (ASS1), the enzyme involved in nitric oxide synthesis. Association with ASS1 impairs its activity and reduces the production of nitric oxide, which subsequently prevents apoptosis. Under normal NADPH concentrations, the protein is found as a dimer and hides the binding site for ASS1. Recombinant human NMRAL1 protein, fused to His-tag at N-terminus, was expressed in E. coli and

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purified by using conventional chromatography techniques.

Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH MGSH>MVDKKL VVFGGTGAQ GGSVARTLLE DGTFKVRVVT RNPRKKAKE
LRLQGAEEVQ GDQDDQVIME LALNGAYATF IVTNYWESCS QEQEVKQGKL LADLARRLGL HYVVYSGLN IKKLTAGRLA
AAHFDGKGEV EEYFRDIGVP MTSVRLPCYF ENLLSHFLPQ KAPDGKSYLL SLPTGDVPMD GMSVSDLGPV VLSLLKMPEK
YVGQNIPLST CRHTAEEYAA LLTKHTRKVV HDAKMTPEDY EKLGFPGARD LANMFRFYAL RPDRDIELTL RLNPKALTLD
QWLEQHKGDF NLL

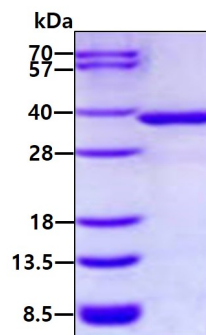
General References

Gan,Q., et al. (2009) J. Cell. Sci. 122 (PT 22), 4081-4088

Lian,M., et al. (2009) J. Biol. Chem. 284 (27), 17998-18006

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.