Recombinant human NABP1 protein

Catalog Number: ATGP2353

PRODUCT INFORMATION

Expression system
E.coli

Domain
1-204aa

UniProt No.
Q96AH0

NCBI Accession No.
NP_001026886

Alternative Names
Nucleic acid binding protein 1, OBFC2A, SOSS-B2, SSB2

PRODUCT SPECIFICATION

Molecular Weight
24.8 kDa (227aa) confirmed by MALDI-TOF

Concentration
0.5mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.2M NaCl, 50% glycerol, 2mM DTT

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
Nucleic acid binding protein 1, also known as NABP1, is component of the SOSS complex, a multiprotein complex that functions downstream of the MRN complex to promote DNA repair and G2/M checkpoint. In the SOSS complex, the protein acts as a sensor of single-stranded DNA that binds to single-stranded DNA, in particular to polypyrimidines. The SOSS complex associates with DNA lesions and influences diverse endpoints in the cellular DNA damage response including cell-cycle checkpoint activation, recombinational repair and maintenance of genomic stability. This protein is required for efficient homologous recombination-dependent repair of double-

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strand breaks (DSBs) and ATM-dependent signaling pathways. Recombinant human NABP1 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

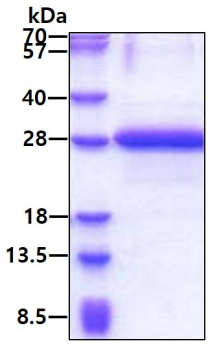
<MGSSHHHHHH SSGLVPRGSH MGS>MNRVNDP LIFIRDIKPG LKNLNVVFIV LEIGRVTKTK DGHEVRSCKV ADKTGSITIS VWDEIGGLIQ PGDIIRLTRG YASMWKGCLT LYTGRGGELQ KIGEFCMVYS EVPNFSEPNP DYRGQQNKGA QSEQKNNSMN SNMGTGTFGP VGNGVHTGPE SREHQFSHAG RSNGRGLINP QLQGTASNQT VMTTISNGRD PRRAFKR

General References

Li Y., et al. (2009) J. Biol. Chem. 284:23525-23531
Huang J., et al. (2009) Mol. Cell. 35:384-393

DATA

SDS-PAGE



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