

NABP1, 1-204aa, Human, His tag, E.coli

Cat.NO.: TP03080

3th Edition

Synonyms:Nucleic acid binding protein 1, OBFC2A, SOSS-B2, SSB2

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-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.

Form:Liquid. In 20mM Tris-HCI buffer (pH 8.0) containing 0.2M NaCI, 50% glycerol, 2mM DTT

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

Sequences:

MGSSHHHHHHSSGLVPRGSHMGSMNRVNDPLIFIRDIKPGLKNLNVVFIVLEIGRVTKTKDGHEVRSCKVADKTGSI TISVWDEIGGLIQPGDIIRLTRGYASMWKGCLTLYTGRGGELQKIGEFCMVYSEVPNFSEPNPDYRGQQNKGAQSE QKNNSMNSNMGTGTFGPVGNGVHTGPESREHQFSHAGRSNGRGLINPQLQGTASNQTVMTTISNGRDPRRAFK R

Purity:> 95% by HPLC

Concentration: 0.5mg/ml (determined by Bradford assay)

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.