abcam

Product datasheet

Recombinant Human RPA32/RPA2 protein ab101216

1 Image

Description

Product name Recombinant Human RPA32/RPA2 protein

Purity > 85 % SDS-PAGE.

ab101216 was purified using anion-exchange chromatography (DEAE sepharose resin) and gel-

filtration chromatography (Sephacryl S-200) with 20mM Tris pH 7.5, 2mM EDTA.

Expression system Escherichia coli

Accession P15927

Protein length Full length protein

Animal free No

Nature Recombinant

Species Human

Sequence MGSSHHHHHHSSGLVPRGSHMGSMWNSGFESYGSSSY

GGAGGYTQSPGGF

GSPAPSQAEKKSRARAQHIVPCTISQLLSATLVDEVFRIGN

VEISQVTIV

GIIRHAEKAPTNIVYKIDDMTAAPMDVRQWVDTDDTSSENT

VVPPETYVK

VAGHLRSFQNKKSLVAFKIMPLEDMNEFTTHILEVINAHMV

LSKANSQPS

AGRAPISNPGMSEAGNFGGNSFMPANGLTVAQNQVLNLI

KACPRPEGLNF

QDLKNQLKHMSVSSIKQAVDFLSNEGHIYSTVDDDHFKST

DAE

Predicted molecular weight 32 kDa including tags

Amino acids 1 to 270

Tags His tag N-Terminus

Specifications

Our Abpromise guarantee covers the use of ab101216 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications SDS-PAGE

Mass Spectrometry

1

Mass spectrometry

MALDI-TOF

Form

Liquid

Preparation and Storage

Stability and Storage

Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

pH: 8.00

 $Constituents: 0.0154\% \ DTT, 0.316\% \ Tris \ HCI, 10\% \ Glycerol \ (glycerin, glycerine), 0.58\% \ Sodium$

chloride

General Info

Function

Required for DNA recombination, repair and replication. The activity of RP-A is mediated by single-stranded DNA binding and protein interactions.

Functions as component of the alternative replication protein A complex (aRPA). aRPA binds single-stranded DNA and probably plays a role in DNA repair; it does not support chromosomal DNA replication and cell cycle progression through S-phase. In vitro, aRPA cannot promote efficient priming by DNA polymerase alpha but supports DNA polymerase delta synthesis in the presence of PCNA and replication factor C (RFC), the dual incision/excision reaction of nucleotide excision repair and RAD51-dependent strand exchange.

Post-translational modifications

Phosphorylated in a cell-cycle-dependent manner (from the S phase until mitosis).

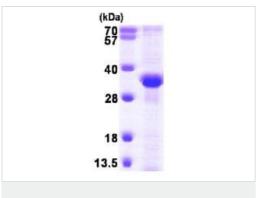
Phosphorylated by ATR upon DNA damage, which promotes its translocation to nuclear foci. Can be phosphorylated in vitro by PRKDC/DNA-PK in the presence of Ku and DNA, and by CDK1.

Cellular localization

Nucleus. Nucleus > PML body. Also present in PML nuclear bodies. Redistributes to discrete

nuclear foci upon DNA damage.

Images



ab101216 at 3 µg analysed by 15% SDS PAGE.

SDS-PAGE - Recombinant Human RPA32/RPA2 protein (ab101216)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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