# abcam

## Product datasheet

## Recombinant Human Radl protein ab97946

## 1 Image

**Description** 

Product name Recombinant Human Rad1 protein

Purity > 85 % SDS-PAGE.

ab97946 is purified using conventional chromatography techniques.

**Expression system** Escherichia coli

Accession O60671

Protein length Full length protein

Animal free No

**Nature** Recombinant

**Species** Human

Sequence MGSSHHHHHHSSGLVPRGSHMPLLTQQIQDEDDQYSLV

**ASLDNVRNLSTI** 

LKAIHFREHATCFATKNGIKVTVENAKCVQANAFIQAGIFQE

**FKVQEESV** 

 ${\sf TFRINLTVLLDCLSIFGSSPMPGTLTALRMCYQGYGYPLML}$ 

FLEEGGVVT

VCKINTQEPEETLDFDFCSTNVINKIILQSEGLREAFSELDM

TSEVLQIT

MSPDKPYFRLSTFGNAGSSHLDYPKDSDLMEAFHCNQTQ

**VNRYKISLLKP** 

STKALVLSCKVSIRTDNRGFLSLQYMIRNEDGQICFVEYYC

CPDEEVPES ES

Predicted molecular weight 34 kDa including tags

Amino acids 1 to 282

Tags His tag N-Terminus

## **Specifications**

Our Abpromise guarantee covers the use of ab97946 in the following tested applications.

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

**Applications** Mass Spectrometry

SDS-PAGE

Form Liquid

1

## **Preparation and Storage**

#### Stability and Storage

Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

pH: 8.00

Constituents: 0.0154% DTT, 0.316% Tris HCI, 10% Glycerol (glycerin, glycerine), 1.16% Sodium chloride

#### **General Info**

#### **Function**

Component of the 9-1-1 cell-cycle checkpoint response complex that plays a major role in DNA repair. The 9-1-1 complex is recruited to DNA lesion upon damage by the RAD17-replication factor C (RFC) clamp loader complex. Acts then as a sliding clamp platform on DNA for several proteins involved in long-patch base excision repair (LP-BER). The 9-1-1 complex stimulates DNA polymerase beta (POLB) activity by increasing its affinity for the 3'-OH end of the primer-template and stabilizes POLB to those sites where LP-BER proceeds; endonuclease FEN1 cleavage activity on substrates with double, nick, or gap flaps of distinct sequences and lengths; and DNA ligase I (LIG1) on long-patch base excision repair substrates. Isoform 1 possesses 3'->5' double stranded DNA exonuclease activity.

#### Tissue specificity

Sequence similarities

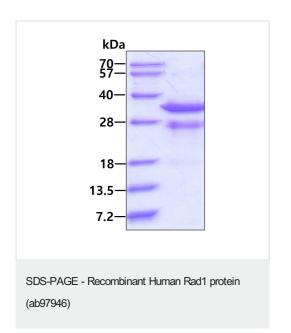
Cellular localization

Expressed in testis, uterus, bladder, spleen, ovaries, lung, brain and muscle (at protein level).

Belongs to the rad1 family.

Nucleus.

## **Images**



15% SDS-PAGE showing ab97946 at approximately 33.9kDa ( $3\mu g$ ).

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

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