

Product datasheet

Rad51 overexpression 293T lysate (whole cell) ab94044

2 Images

Overview

Product name	Rad51 overexpression 293T lysate (whole cell)
General notes	ab94044 is a 293T cell transfected lysate in which Human Rad51 has been transiently over-expressed using a pCMV-Rad51 plasmid. The lysate is provided in 1X Sample Buffer.
Tested applications	Suitable for: WB

Properties

Mycoplasma free	Yes
Form	Liquid
Storage instructions	Shipped on dry ice. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	Constituents: 0.01% Bromophenol blue, 2.3% Beta mercaptoethanol, 2% Sodium lauryl sulfate, 0.788% Tris HCl, 10% Glycerol (glycerin, glycerine)
Background	Disease: Breast cancer Mirror movements 2 Defects in RAD51 are found in a patient with microcephaly, mental retardation without bone marrow failure and pediatric cancers. Domain: The nuclear localization may reside in the C-terminus (between 259 and 339 AA). Function: Plays an important role in homologous strand exchange, a key step in DNA repair through homologous recombination. Binds to single and double-stranded DNA and exhibits DNA-dependent ATPase activity. Catalyzes the recognition of homology and strand exchange between homologous DNA partners to form a joint molecule between a processed DNA break and the repair template. Binds to single-stranded DNA in an ATP-dependent manner to form nucleoprotein filaments which are essential for the homology search and strand exchange (PubMed:26681308). Part of a PALB2-scaffolded HR complex containing BRCA2 and RAD51C and which is thought to play a role in DNA repair by HR. Plays a role in regulating mitochondrial DNA copy number under conditions of oxidative stress in the presence of RAD51C and XRCC3. PTM: Ubiquitinated by the SCF(FBXO18) E3 ubiquitin ligase complex, regulating RAD51 subcellular location and preventing its association with DNA. Phosphorylated. Phosphorylation of Thr-309 by CHEK1 may enhance association with chromatin at sites of DNA damage and promote DNA repair by homologous recombination. Phosphorylation by ABL1 inhibits function. Similarity: Belongs to the RecA family. RAD51 subfamily. Contains 1 HhH domain. Tissue specificity: Highly expressed in testis and thymus, followed by small intestine, placenta, colon, pancreas and ovary. Weakly expressed in breast.

Applications

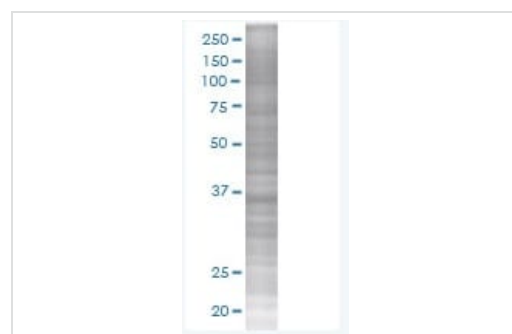
The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab94044 in the following tested applications.

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

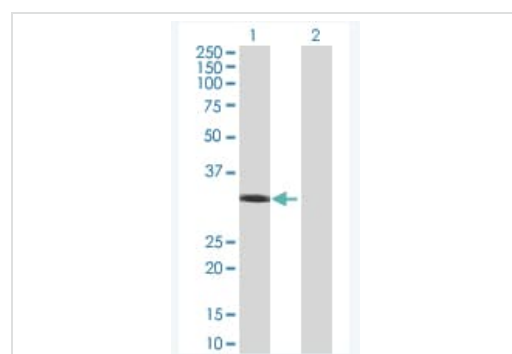
Application	Abreviews	Notes
WB		Use at an assay dependent dilution.

Images



SDS-PAGE - Rad51 overexpression 293T lysate
(whole cell) (ab94044)

ab94044 at 15µg/lane on an SDS-PAGE gel.



Western blot - Rad51 overexpression 293T lysate
(whole cell) (ab94044)

All lanes : Anti-Rad51 antibody - BSA and Azide free (**ab88572**) at 1/500 dilution

Lane 1 : ab94044

Lane 2 : non transfected lysate

Lysates/proteins at 25 µg per lane.

Secondary

All lanes : non-Abcam, Goat Anti-mouse IgG (H and L) HRP conjugated at 1/2500 dilution

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

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