


Product datasheet

Anti-Rad17 (phospho S645) antibody ab3620

[4 References](#) [3 Images](#)

Overview

Product name	Anti-Rad17 (phospho S645) antibody
Description	Rabbit polyclonal to Rad17 (phospho S645)
Host species	Rabbit
Tested applications	Suitable for: IHC-P, WB
Species reactivity	Reacts with: Mouse, Human Predicted to work with: Chimpanzee, Rhesus monkey, Gorilla, African green monkey, Orangutan 
Immunogen	Synthetic peptide corresponding to Human Rad17 (phospho S645). Phosphorylated synthetic peptide, which represented a portion of human Rad17 (GeneID 5884) around serine 645 according to the numbering given in entry NP_002864.1.
Positive control	IHC: human colon carcinoma tissue; mouse renal cell carcinoma tissue; WB: HeLa and HEK293T treated with Etoposide
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7 Preservative: 0.1% Sodium azide Constituents: 0.021% PBS, 1.764% Sodium citrate, 1.815% Tris
Purity	Immunogen affinity purified
Purification notes	Antibodies that were not phospho-specific were removed by solid phase absorption. Antibodies specific for Rad 17pSer 645 were affinity purified using the phospho peptide immobilized on solid support.

Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab3620 in the following tested applications.

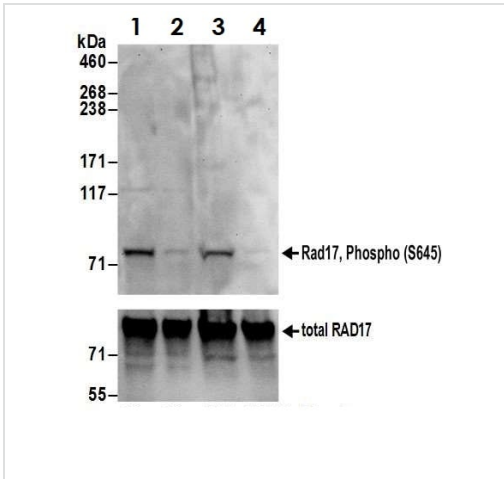
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/500 - 1/2000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		1/1000 - 1/5000. Detects a band of approximately 85-88 kDa (predicted molecular weight: 77 kDa).

Target

Function	Essential for sustained cell growth, maintenance of chromosomal stability, and ATR-dependent checkpoint activation upon DNA damage. Has a weak ATPase activity required for binding to chromatin. Participates in the recruitment of the RAD1-RAD9-HUS1 complex onto chromatin, and in CHEK1 activation. May also serve as a sensor of DNA replication progression, and may be involved in homologous recombination.
Tissue specificity	Overexpressed in various cancer cell lines and in colon carcinoma (at protein level). Isoform 2 and isoform 3 are the most abundant isoforms in non irradiated cells (at protein level). Ubiquitous at low levels. Highly expressed in testis, where it is expressed within the germinal epithelium of the seminiferous tubuli. Weakly expressed in seminomas (testicular tumors).
Sequence similarities	Belongs to the rad17/RAD24 family.
Post-translational modifications	Phosphorylated. Phosphorylation on Ser-646 and Ser-656 is cell cycle-regulated, enhanced by genotoxic stress, and required for activation of checkpoint signaling. Phosphorylation is mediated by ATR upon UV or replication arrest, whereas it may be mediated both by ATR and ATM upon ionizing radiation. Phosphorylation on both sites is required for interaction with RAD1 but dispensable for interaction with RFC3 or RFC4.
Cellular localization	Nucleus. Phosphorylated form redistributes to discrete nuclear foci upon DNA damage.

Images



Western blot - Anti-Rad17 (phospho S645) antibody (ab3620)

All lanes : Anti-Rad17 (phospho S645) antibody (ab3620) at 0.4 $\mu\text{g/ml}$

Lane 1 : HeLa whole cell lysate treated with Etoposide

Lane 2 : HeLa whole cell lysate mock-treated

Lane 3 : HEK293T whole cell lysate treated with Etoposide

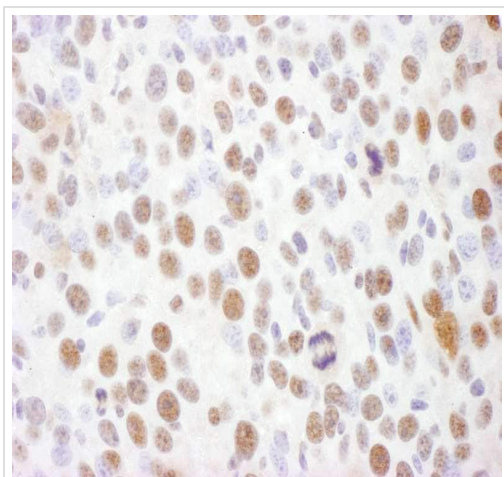
Lane 4 : HEK293T whole cell lysate mock-treated

Lysates/proteins at 50 μg per lane.

Predicted band size: 77 kDa

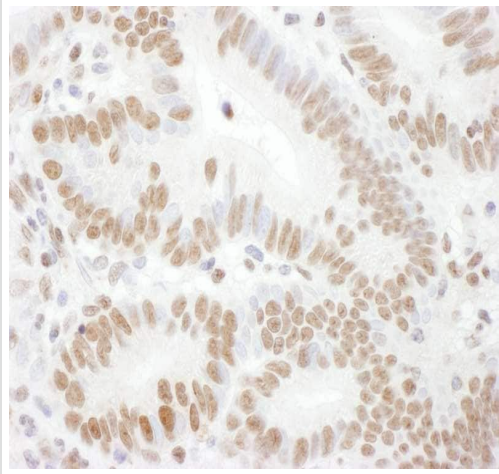
Exposure time: 30 seconds

Lower panel: membrane was reblotted with goat anti-Rad17 antibody to examine total Rad17.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Rad17 (phospho S645) antibody (ab3620)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse renal cell carcinoma tissue labelling Rad17 with ab3620 at 1/1000 dilution. Heat mediated antigen retrieval performed with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Rad17 (phospho S645) antibody (ab3620)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human colon carcinoma tissue labelling Rad17 with ab3620 at 1/1000 dilution. Heat mediated antigen retrieval performed with citrate buffer pH 6 before commencing with IHC staining protocol.

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors