abcam

Product datasheet

Anti-Rad17 (phospho S656) antibody [EPR3145] - BSA and Azide free ab247429

Recombinant

RabMAb

4 Images

Overview

Product name Anti-Rad17 (phospho S656) antibody [EPR3145] - BSA and Azide free

Description Rabbit monoclonal [EPR3145] to Rad17 (phospho S656) - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: IHC-P, WB, ICC/IF

Unsuitable for: Flow Cyt or IP

Species reactivity Reacts with: Human

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

General notes ab247429 is the carrier-free version of <u>ab76012</u>.

Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our <u>conjugation kits</u> for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

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Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

Clonality Monoclonal
Clone number EPR3145

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab247429 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		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
WB		Use at an assay dependent concentration. Predicted molecular weight: 77 kDa.
ICC/IF		Use at an assay dependent concentration.

Application notes Is unsuitable for Flow Cyt or IP.

Τ	a	rq	et

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

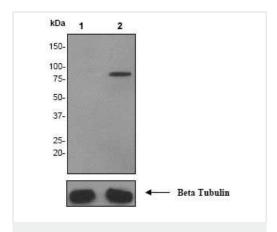
Phosphorylated. Phosphorylation on Ser-646 and Ser-656 is cell cycle-regulated, enhanced by genotoxic stress, and required for activation of checkpoint signaling. Phosphorylation is mediated

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 S656) antibody [EPR3145] - BSA and Azide free (ab247429) **All lanes :** Anti-Rad17 (phospho S656) antibody [EPR3145] (ab76012) at 1/10000 dilution

Lane 1: HeLa cell lysate, untreated

Lane 2: HeLa cell lysate treated with Calyculin A

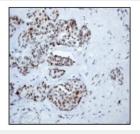
Lysates/proteins at 10 µg per lane.

Secondary

All lanes: Goat anti-rabbit HRP at 1/2000 dilution

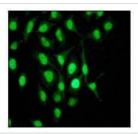
Predicted band size: 77 kDa Observed band size: 80 kDa

This data was developed using <u>ab76012</u>, the same antibody clone in a different buffer formulation.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Rad17 (phospho S656) antibody [EPR3145] - BSA and Azide free (ab247429)

This data was developed using <u>ab76012</u>, the same antibody clone in a different buffer formulation.<u>ab76012</u>, at 1/100-1/250 dilution, staining Rad17 in human breast carcinoma by immunohistochemistry using paraffin-embedded tissue. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-Rad17 (phospho S656) antibody [EPR3145] - BSA and Azide free (ab247429) This data was developed using <u>ab76012</u>, the same antibody clone in a different buffer formulation.<u>ab76012</u>, at 1/100-1/250 dilution, staining Rad17 in HeLa cells by immunofluorescence.



Success from the first experiment
Confirmed specificity



Anti-Rad17 (phospho S656) antibody [EPR3145] -BSA and Azide free (ab247429)

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