

Product datasheet

Anti-Rad17 (phospho S645) antibody ab3620

4 References 1 Image

Overview

<b>Product name</b>	Anti-Rad17 (phospho S645) antibody
<b>Description</b>	Rabbit polyclonal to Rad17 (phospho S645)
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Chimpanzee, Rhesus monkey, Gorilla, African green monkey, Orngutan 
<b>Immunogen</b>	Synthetic phospho peptide (Human) - which represents a portion of human Rad 17 around serine 645.
<b>Positive control</b>	HeLa whole cell lysate treated with 10 Gy IR.

Properties

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

Applications

Our [Abpromise guarantee](#) covers the use of **ab3620** in the following tested applications.

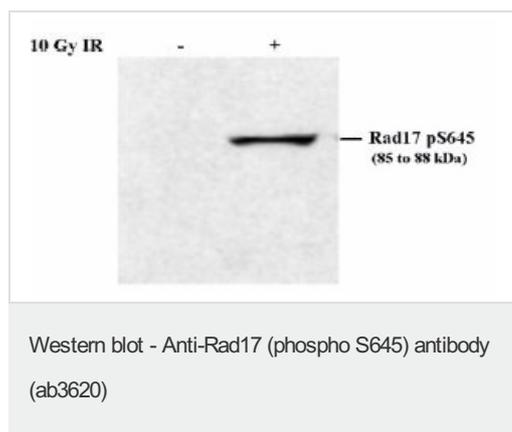
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/500 - 1/5000. Detects a band of approximately 85-88 kDa (predicted molecular weight: 77 kDa).
ICC/IF		Use at an assay dependent dilution. PubMed: 20368419

## Target

<b>Function</b>	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.
<b>Tissue specificity</b>	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).
<b>Sequence similarities</b>	Belongs to the rad17/RAD24 family.
<b>Post-translational modifications</b>	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.
<b>Cellular localization</b>	Nucleus. Phosphorylated form redistributes to discrete nuclear foci upon DNA damage.

## Images



Sample: Whole Cell Lysate (50µg/lane) from HeLa cells treated with 10Gy IR or untreated.

Rabbit anti-Rad 17 pSer645 (ab3620) used at 1:1,000 dilution

Sample: Whole Cell Lysate (50µg/lane) from HeLa cells treated with 10Gy IR or untreated.

Rabbit anti-Rad 17 pSer645 (ab3620) used at 1:1,000 dilution

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

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