

## Product datasheet

# Recombinant Human Rad17 protein ab159302

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### Description

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<b>Product name</b>	Recombinant Human Rad17 protein
<b>Expression system</b>	Wheat germ
<b>Protein length</b>	Protein fragment
<b>Animal free</b>	No
<b>Nature</b>	Recombinant
<b>Species</b>	Human
<b>Sequence</b>	MNQVTDWVDP SFDDFLECSGVSTITATSLGVNNSHRRK NGPSTLESSRF PARKRGNLSSLEQIYGLENSKEYLSENEPWVDKYKPETQH ELAVHKKKIE EVETWLKAQV
<b>Amino acids</b>	1 to 110
<b>Tags</b>	GST tag N-Terminus

### Specifications

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Our **Abpromise guarantee** covers the use of **ab159302** in the following tested applications.

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

<b>Applications</b>	Western blot ELISA
<b>Form</b>	Liquid

### Additional notes

### Preparation and Storage

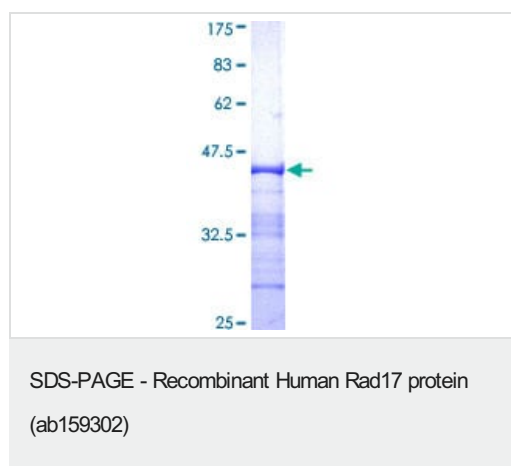
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<b>Stability and Storage</b>	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 8.00 Constituents: 0.31% Glutathione, 0.79% Tris HCl
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### General Info

<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



ab159302 on a 12.5% SDS-PAGE stained with Coomassie Blue.

**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
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- 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.

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