

Product datasheet

Anti-Rad53 antibody [EL7.E1] ab166859

[22 References](#) [2 Images](#)

Overview

| | |
|----------------------------|---|
| Product name | Anti-Rad53 antibody [EL7.E1] |
| Description | Mouse monoclonal [EL7.E1] to Rad53 |
| Host species | Mouse |
| Tested applications | Suitable for: WB |
| Species reactivity | Reacts with: <i>Saccharomyces cerevisiae</i> Does not react with: Mouse, Human |
| Immunogen | Recombinant full length protein. This information is proprietary to Abcam and/or its suppliers. |
| General notes | <p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com.</p> <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. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle. |
| Storage buffer | pH: 7.40 Preservative: 0.02% Sodium azide Constituents: PBS, 6.97% L-Arginine |
| Purity | Protein G purified |
| Clonality | Monoclonal |
| Clone number | EL7.E1 |
| Isotype | IgG1 |
| Light chain type | kappa |

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab166859 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 a concentration of 1 µg/ml. Detects a band of approximately 92 kDa (predicted molecular weight: 92 kDa). |

Target

Function

Controls S-phase checkpoint as well as G1 and G2 DNA damage checkpoints. Phosphorylates proteins on serine, threonine, and tyrosine. Prevents entry into anaphase and mitotic exit after DNA damage via regulation of the Polo kinase CDC5. Seems to be involved in the phosphorylation of RPH1.

Sequence similarities

Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. CHEK2 subfamily.
Contains 2 FHA domains.
Contains 1 protein kinase domain.

Domain

FHA domains are phosphothreonine recognition modules, FHA 1 strongly selects for Asp at position +3 relative to phosphothreonine, whereas FHA 2 selects for Ile in this position.

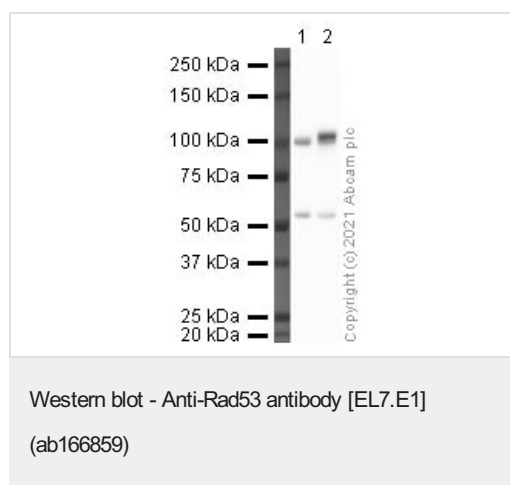
Post-translational modifications

Autophosphorylated.

Cellular localization

Nucleus.

Images



All lanes : Anti-Rad53 antibody [EL7.E1] (ab166859) at 1 µg/ml

Lane 1 : S. Cerevisiae untreated

Lane 2 : S. Cerevisiae MMS treated

Lysates/proteins at 5 µl per lane.

Secondary

All lanes : HRP conjugated Goat Anti-Mouse IgG (H+L) at 1/5000 dilution

Performed under reducing conditions.

Predicted band size: 92 kDa

Observed band size: 100 kDa

Exposure time: 4 minutes

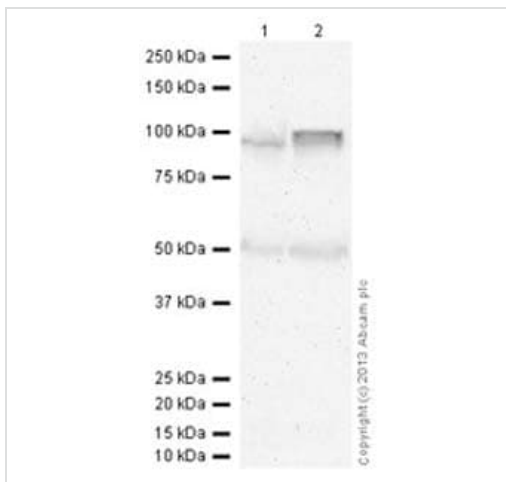
Western Blot showing ab166859 detecting both unphosphorylated and phosphorylated Rad53.

Blocking buffer: 3% Milk

Developed using the ECL technique.

Performed under reducing conditions.

Additional bands at: 55 kDa. Identity unknown.



Western blot - Anti-Rad53 antibody [EL7.E1]
(ab166859)

All lanes : Anti-Rad53 antibody [EL7.E1] (ab166859) at 1 µg/ml

Lane 1 : TCA preps from *S. cerevisiae* cells

Lane 2 : TCA preps from *S. cerevisiae* cells treated with Hydroxyurea (HU)

Lysates/proteins at 15 µg per lane.

Secondary

All lanes : Goat Anti-Mouse IgG H&L (HRP) preadsorbed (**ab97040**) at 1/10000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 92 kDa

Observed band size: 92 kDa

Additional bands at: 50 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 20 minutes

Western Blot showing ab166859 detecting both unphosphorylated and phosphorylated Rad53.

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