

Product datasheet

Anti-FANCI (phospho S559) antibody ab228518

★★★★★ 1 Abreviews 2 Images

Overview

Product name	Anti-FANCI (phospho S559) antibody
Description	Rabbit polyclonal to FANCI (phospho S559)
Host species	Rabbit
Specificity	Specific for endogenous levels of the ~150 kDa FANCI protein phosphorylated at Ser559. Immunolabeling is increased when HeLa cells are treated with 256nm UV light for 20 minutes and completely eliminated by treatment with lambda phosphatase.
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide corresponding to Human FANCI (phospho S559). Database link: Q9NV11
Positive control	WB: HeLa cell lysate treated with UV (~254 nm) for 20 minutes.
General notes	<p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.</p> <p>Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.</p> <p>Please check that this product meets your needs before purchasing. 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, as well as 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 long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.50 Constituents: 0.24% HEPES, 0.87% Sodium chloride, 0.01% BSA, 50% Glycerol
Purity	Immunogen affinity purified
Purification notes	ab228518 is prepared from pooled rabbit serum by affinity purification via sequential chromatography on phospho- and dephosphopeptide affinity columns.
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab228518** in the following tested applications.

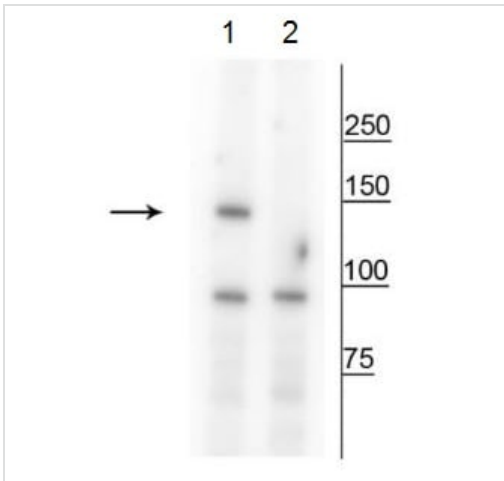
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/250. Predicted molecular weight: 149 kDa.

Target

Function	Required for maintenance of chromosomal stability. Involved in the repair of DNA double-strand breaks by homologous recombination and in the repair of DNA cross-links. Participates in S phase and G2 phase checkpoint activation upon DNA damage. Promotes FANCD2 ubiquitination and recruitment to DNA repair sites.
Involvement in disease	Defects in FANCI are a cause of Fanconi anemia complementation group I (FANCI) [MIM:609053]. It is a disorder affecting all bone marrow elements and resulting in anemia, leukopenia and thrombopenia. It is associated with cardiac, renal and limb malformations, dermal pigmentary changes, and a predisposition to the development of malignancies. At the cellular level it is associated with hypersensitivity to DNA-damaging agents, chromosomal instability (increased chromosome breakage) and defective DNA repair.
Domain	The C-terminal 30 residues are probably required for function in DNA repair.
Post-translational modifications	Monoubiquitinated on Lys-523 during S phase and upon genotoxic stress. Deubiquitinated by USP1 as cells enter G2/M, or once DNA repair is completed. Monoubiquitination requires the FANCA-FANCB-FANCC-FANCE-FANCF-FANCG-FANCM complex. Ubiquitination is required for binding to chromatin, DNA repair, and normal cell cycle progression. Phosphorylated in response to DNA damage by ATM and/or ATR.
Cellular localization	Nucleus. Concentrates in nuclear foci upon genotoxic stress.

Images



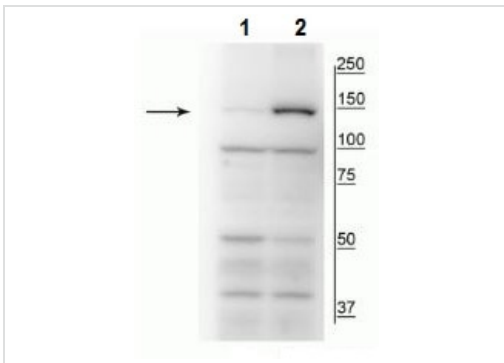
Western blot - Anti-FANCI (phospho S559) antibody (ab228518)

All lanes : Anti-FANCI (phospho S559) antibody (ab228518) at 1/250 dilution

Lane 1 : HeLa (human epithelial cell line from cervix adenocarcinoma) cell lysate treated with UV (~254 nm) for 20 minutes

Lane 2 : HeLa (human epithelial cell line from cervix adenocarcinoma) cell lysate treated with UV (~254 nm) for 20 minutes followed by treatment with lambda phosphatase (1200 units for 30 min)

Predicted band size: 149 kDa



Western blot - Anti-FANCI (phospho S559) antibody (ab228518)

All lanes : Anti-FANCI (phospho S559) antibody (ab228518) at 1/250 dilution

Lane 1 : HeLa (human epithelial cell line from cervix adenocarcinoma) cell lysate treated with UV (~254 nm) for 0 minutes

Lane 2 : HeLa (human epithelial cell line from cervix adenocarcinoma) cell lysate treated with UV (~254 nm) for 20 minutes

Predicted band size: 149 kDa

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

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