abcam

Product datasheet

Anti-FANCI antibody ab74332

5 References 2 Images

Overview

Product name Anti-FANCI antibody

Description Rabbit polyclonal to FANCI

Host species Rabbit

Tested applications
Suitable for: WB, IP
Species reactivity
Reacts with: Human

Predicted to work with: Horse, Dog, Pig, Chimpanzee, Rhesus monkey, Gorilla, Orangutan, Bat

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Immunogen Synthetic peptide corresponding to a region between residue 1025 and 1075 of human

KIAA1794 (NP 060663.2)

Positive control Whole cell lysates from HeLa and 293T cells.

General notesThe 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.

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

Properties

Form Liquid

Storage instructions Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Storage buffer pH: 6.8

Preservative: 0.09% Sodium azide

Constituents: 0.1% BSA, Tris buffered saline

Purity Immunogen affinity purified

Clonality Polyclonal

Isotype IgG

Applications

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The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab74332 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		1/2000 - 1/10000. Predicted molecular weight: 149 kDa.
IP		Use at 2-5 µg/mg of lysate.

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

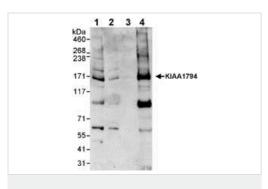
Monoubiquitinated on Lys-523 during S phase and upon genotoxic stress. Deubiquitinated by USP1 as cells enter G2/M, or once DNA repair is completed. Monoubiquitination requires the FANCA-FANCB-FANCC-FANCE-FANCG-FANCM complex. Ubiquitination is required

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 antibody (ab74332)

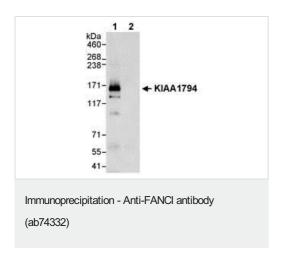
All lanes: Anti-FANCI antibody (ab74332) at 0.04 µg/ml

Lane 1: Whole HeLa cell lysate at 50 μg Lane 2: Whole HeLa cell lysate at 15 μg Lane 3: Whole HeLa cell lysate at 5 μg Lane 4: Whole 293T cell lysate at 50 μg

Predicted band size: 149 kDa

Additional bands at: 100 kDa, 65 kDa. We are unsure as to the

identity of these extra bands.



Detection of Human KIAA1794 by Immunoprecipitation in Whole cell lysate from HeLa cells (1 mg for IP, 20% of IP loaded) using ab74332 at 3 μ g/mg for IP (Lane 1) and at 1 μ g/ml for subsequent WB detection. Lane 2 represents IgG control IP.

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

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