

Anti-FANCI (Ser559) Antibody

Our Anti-FANCI (Ser559) rabbit polyclonal phosphospecific primary antibody from PhosphoSolutions is
Catalog # AN1383

Product Information

Application	WB
Primary Accession	Q9NVI1
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	149324

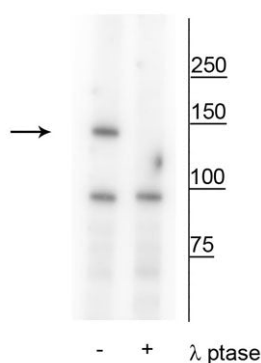
Additional Information

Gene ID	55215
Other Names	FANCI antibody, FANCI gene antibody, FANCI_HUMAN antibody, Fanconi anemia group I protein antibody, Fanconi anemia complementation group I antibody, FLJ10719 antibody, FLJ14658 antibody, KIAA1794 antibody, Protein FANCI antibody, Protein FANCI antibody,
Target/Specificity	Fanconi anemia, FA, is a rare disorder where cells cannot prevent, repair, or tolerate DNA damage, leading to cancer, progressive bone marrow failure and developmental abnormalities (Ishiai et al., 2008). 16 genes have been implicated in FA, and their products constitute a common FA pathway (Walden and Deans 2014). FANCI (Fanconi anemia complementation group I), is one of two substrates for monoubiquitination by the FANCL-containing core complex, and is crucial for DNA repair via FAP and intrastrand cross-links (Walden and Deans, 2014). Phosphorylation of Ser-556 and Ser-559 are highly conserved and have been determined to be ATM/ATR kinase substrates for the FA-DNA pathway (Smogorzewska et al., 2007). Furthermore, the phosphorylation of Ser-556 and Ser-559 have been shown to play key roles in FANCI physically associating with FANCD2, stabilizing the ID2 complex, and supporting its DNA binding and subsequent D2-ubiquitination (Walden and Deans, 2014). Research continues to determine if one site plays more of a role in the DNA repair/damage checkpoint of the FA pathway and stabilization of the ID2 complex.
Dilution	WB~1:1000
Format	Antigen Affinity Purified from Pooled Serum
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Anti-FANCI (Ser559) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

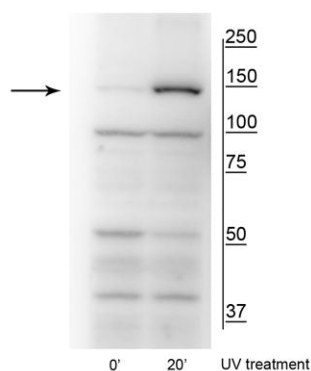
Background

Fanconi anemia, FA, is a rare disorder where cells cannot prevent, repair, or tolerate DNA damage, leading to cancer, progressive bone marrow failure and developmental abnormalities (Ishiai et al., 2008). 16 genes have been implicated in FA, and their products constitute a common FA pathway (Walden and Deans 2014). FANCI (Fanconi anemia complementation group I), is one of two substrates for monoubiquitination by the FANCL-containing core complex, and is crucial for DNA repair via FAP and intrastrand cross-links (Walden and Deans, 2014). Phosphorylation of Ser-556 and Ser-559 are highly conserved and have been determined to be ATM/ATR kinase substrates for the FA-DNA pathway (Smogorzewska et al., 2007). Furthermore, the phosphorylation of Ser-556 and Ser-559 have been shown to play key roles in FANCI physically associating with FANCD2, stabilizing the ID2 complex, and supporting its DNA binding and subsequent D2-ubiquitination (Walden and Deans, 2014). Research continues to determine if one site plays more of a role in the DNA repair/damage checkpoint of the FA pathway and stabilization of the ID2 complex.

Images



Western blot of HeLa cell lysate treated with UV (~254nm) for 20' showing specific immunolabeling of the ~150 kDa FANCI protein phosphorylated at Ser559 in the first lane (-). Phosphospecificity is shown in the second lane (+) where immunolabeling is completely eliminated by blot treatment with lambda phosphatase (λ -Ptase, 1200 units for 30 min).



Western blot of HeLa cell lysates that had been treated with UV (~254 nm) for 0' or 20' showing specific immunolabeling of the ~150 kDa FANCI protein phosphorylated at Ser559.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.