

ARG52279 anti-FANCI phospho (Ser556) antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes FANCI phospho (Ser556)
Tested Reactivity	Hu
Predict Reactivity	Bov, Goat, NHuPrm, Sheep
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	FANCI
Species	Human
Immunogen	Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser556 conjugated to KLH
Conjugation	Un-conjugated
Alternate Names	Fanconi anemia group I protein; KIAA1794; Protein FANCI

Application Instructions

Application table	Application	Dilution
	WB	1:1,000
Application Note	Specific for the ~150k FANCI protein phosphorylated at Ser556 . Immunolabeling of FANCI is completely eliminated by lambda-phosphatase treatment. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

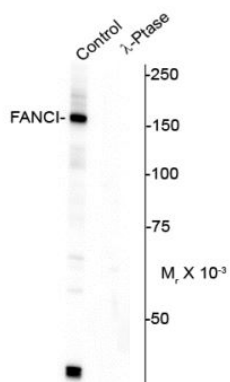
Properties

Form	Liquid
Purification	Affinity Purified
Buffer	10 mM HEPES (pH 7.5), 150 mM NaCl, 0.1 mg/ml BSA and 50% Glycerol
Stabilizer	0.1 mg/ml BSA, 50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 55215 Human Swiss-port # Q9NVI1 Human
Gene Symbol	FANCI
Gene Full Name	Fanconi anemia, complementation group I
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 at Ser 556 has been shown to play a key role in FANCI physically associating with FANCD2, stabilizing the ID2 complex, and supporting its DNA binding and subsequent D2-ubiquitination (Walden and Deans, 2014).
Research Area	Gene Regulation antibody
Calculated Mw	149 kDa
PTM	Monoubiquitinated by FANCL 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. Monoubiquitination is stimulated by DNA-binding. Phosphorylated in response to DNA damage by ATM and/or ATR.

Images



ARG52279 anti-FANCI phospho (Ser556) antibody WB image

Western blot: HeLa cell lysate stained with ARG52279 anti-FANCI phospho (Ser556) antibody showing specific immunolabeling of the ~150kd FANCI protein phosphorylated at Ser556 (control). Phosphospecificity is shown in the second lane (lambda-phosphatase: λ -Ptase). The blot is identical to the control except that the lysate was incubated in λ -Ptase (800 units/1mg protein for 30 min). The immunolabeling is completely eliminated by treatment with λ -Ptase.