

ARG52279 anti-FANCI phospho (Ser556) antibody

Package: 50 µl
Store at: -20°C

Summary

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|---------------------|---|
| 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 | <p>Specific for the ~150k FANCI protein phosphorylated at Ser556 . Immunolabeling of FANCI is completely eliminated by lambda-phosphatase treatment.</p> <p>* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.</p> | |

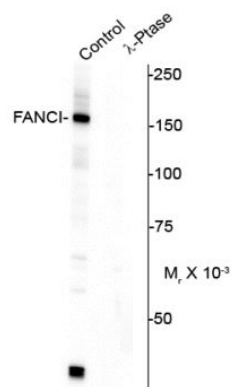
Properties

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|---------------------|---|
| 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

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|----------------|---|
| Database links | GeneID: 55215 Human Swiss-port # Q9NVI1 Human |
| Gene Symbol | FANCI |
| Gene Full Name | Fanconi anemia, complementation group I |
| Background | <p>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).</p> |
| Research Area | Gene Regulation antibody |
| Calculated Mw | 149 kDa |
| PTM | <p>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.</p> <p>Phosphorylated in response to DNA damage by ATM and/or ATR.</p> |

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.