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Phospho-FANCD2 (Ser222) Antibody

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W	Reactivity: H Mk	Sensitivity: Endogenous	MW (kDa): 155 FANCD2-S, 230 FANCD2-L.	Source/Isotype: Rabbit	UniProt ID: #Q9BXW9	Entrez-Gene Id: 2177
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Product Usage Information	Application Western Blotting	Dilution 1:1000
Storage	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.	
Specificity/Sensitivity	Phospho-FANCD2 (Ser222) Antibody detects endogenous levels of FANCD2 only when phosphorylated at Ser222.	
Source / Purification	Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Ser222 of human FANCD2. Antibodies are purified by protein A and peptide affinity chromatography.	
Background	Fanconi anemia (FA) is an autosomal recessive genetic disorder resulting in symptoms that include chromosomal breakage, bone marrow failure, hypersensitivity to DNA cross-linking agents (such as mitomycin C), and a predisposition to cancer (1). In response to DNA damage, the FA nuclear complex (FANCA, FANCB, FANCC, FANCE, FANCF, FANCG, FANCM) induces mono-ubiquitination of FANCD2 and FANCI (2). Monoubiquitination of FANCD2 induces localization of FANCD2 to sites of DNA damage, where it interacts with BRCA1. FANCI/BRIP1, FANCD1/BRCA2, and FANCN/PALB2 are also recruited to sites of DNA damage (3).	
Background References	<ol style="list-style-type: none"> 1. Alter, B.P. (1996) <i>Am J Hematol</i> 53, 99-110. 2. Fei, P. et al. (2005) <i>Cell Cycle</i> 4, 80-6. 3. Garcia-Higuera, I. et al. (2001) <i>Mol Cell</i> 7, 249-62. 	

Species Reactivity	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
Western Blot Buffer	IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.
Applications Key	W: Western Blotting
Cross-Reactivity Key	H: Human Mk: Monkey
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