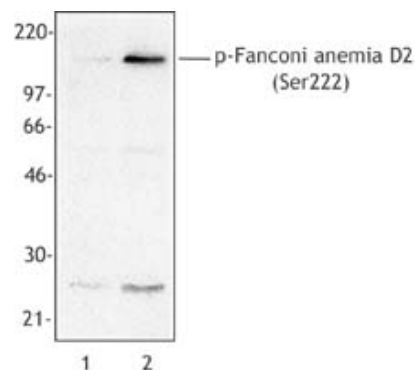


Product Data Sheet

Purified anti-Fanconi anemia D2 Phospho (Ser222)

Catalog # / Size: 618002 / 200 µl (20 Western blots)
Clone: Poly6180
Isotype: Rabbit IgG
Immunogen: Modified peptide
Reactivity: Human, reacts with Ser222-phosphorylated FANCD2
Preparation: The antibody was purified by antigen-affinity chromatography.
Formulation: This antibody is provided in phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 50% glycerol.
Storage: Upon receipt, store frozen at -20° C.



HeLa nuclear extract was resolved by electrophoresis, transferred to nitrocellulose, and probed with rabbit anti-Fanconi D2 (Ser222) antibody. Proteins were visualized using a donkey anti-rabbit secondary conjugated to HRP and a chemiluminescence detection system. Lane 1, control cells. Lane 2, HeLa cells exposed to 10 Gy radiation harvested at 2 hrs.

Applications:

Applications: WB

Recommended Usage: Each lot of this antibody is quality control tested by Western blotting. Western blotting, suggested working dilution(s): Use 10 µl per 5 ml antibody dilution buffer for each mini-gel. It is recommended that the reagent be titrated for optimal performance for each application.

Description: Fanconi anemia (also known as Fanconi anemia complementation group D2 (FANCD2)) is a 166 kD member of Fanconi anemia complementation group D. There are multiple isoforms of this nuclear protein including a post-translationally modified form. Activated FANCD2 co-localizes with BRCA1 in ionizing radiation-induced foci and in synaptonemal complexes of meiotic chromosomes. This protein is critical for cellular resistance to DNA cross-linking and cell-cycle arrest after ionizing radiation. DNA damage leads to monoubiquitination of FANCD2 and targeting to nuclear foci. Monoubiquitination occurs during normal cell cycle progression and is required for RAD51 and BRCA1 binding. This protein forms a complex with Fanconi proteins A, C, F, and G. FANCD2 has also been shown to bind to BRCA1, NBS1, and RAD51. The Poly6180 antibody recognizes the phosphorylated human FANCD2 protein (Ser222) and has been shown to be useful for Western blotting.

Antigen References:

1. Timmers C, *et al.* 2001. *Mol. Cell* 7:241.
2. Gordon S, *et al.* 2003. *Blood* 102:136.
3. Taniguchi T, *et al.* 2002. *Blood* 100:2414.
4. Nakanishi K, *et al.* 2002. *Nat. Cell. Biol.* 4:913.

Related Products:

Product	Clone	Application
Purified anti-BRCA1	Poly6121	WB
Purified anti-Fanconi anemia D2	Poly6214	WB
HRP Donkey anti-rabbit IgG (minimal x-reactivity)	Poly4064	ELISA, IHC, WB



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