

#16323 Store at -20C

FANCD2 (D5L5X) Rabbit mAb**Cell Signaling**
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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP, IF-IC	H	Endogenous	155, 162	Rabbit IgG	#Q9BXW9	2177

Product Usage Information**Application**

Western Blotting
Immunoprecipitation
Immunofluorescence (Immunocytochemistry)

Dilution

1:1000
1:50
1:100 - 1:400

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Specificity / Sensitivity

FANCD2 (D5L5X) Rabbit mAb recognizes endogenous levels of total FANCD2 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly995 of human FANCD2 protein.

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 FANCD2/PALB2 are also recruited to sites of DNA damage (3).

Background References

1. Alter, B.P. (1996) *Am J Hematol* 53, 99-110.
2. Fei, P. et al. (2005) *Cell Cycle* 4, 80-6.
3. Nalepa, G. and Clapp, D.W. (2014) *F1000Prime Rep* 6, 23.
4. Garcia-Higuera, I. et al. (2001) *Mol Cell* 7, 249-62.
5. Garcia-Higuera, I. et al. (2001) *Mol Cell* 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

WB: Western Blotting **IP:** Immunoprecipitation **IF-IC:** Immunofluorescence (Immunocytochemistry)

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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