

**FANCD2 rabbit pAb****Cat#: orb765200 (Manual)**

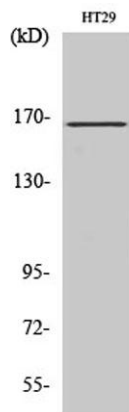
For research use only. Not intended for diagnostic use.

<b>Product Name</b>	FANCD2 rabbit pAb
<b>Host species</b>	Rabbit
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Species Cross-Reactivity</b>	Human;Mouse;Rat
<b>Recommended dilutions</b>	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications.
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human FANCD2. AA range:188-237
<b>Specificity</b>	FANCD2 Polyclonal Antibody detects endogenous levels of FANCD2 protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide..
<b>Storage</b>	Store at -20°C. Avoid repeated freeze-thaw cycles.
<b>Protein Name</b>	Fanconi anemia group D2 protein
<b>Gene Name</b>	FANCD2
<b>Cellular localization</b>	Nucleus . Concentrates in nuclear foci during S phase and upon genotoxic stress. At the onset of mitosis, excluded from chromosomes and diffuses into the cytoplasm, returning to the nucleus at the end of cell division. Observed in a few spots localized in pairs on the sister chromatids of mitotic chromosome arms and not centromeres, one on each chromatids. These foci coincide with common fragile sites and could be sites of replication fork stalling. The foci are frequently interlinked through BLM-associated ultra-fine DNA bridges. Following aphidicolin treatment, targets chromatid gaps and breaks.

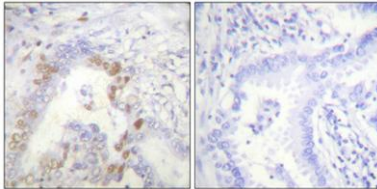
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Clonality</b>	Polyclonal
<b>Concentration</b>	1 mg/ml
<b>Observed band</b>	166kD
<b>Human Gene ID</b>	2177
<b>Human Swiss-Prot Number</b>	Q9BXW9
<b>Alternative Names</b>	FANCD2; FACD; Fanconi anemia group D2 protein; Protein FACD2

**Background**

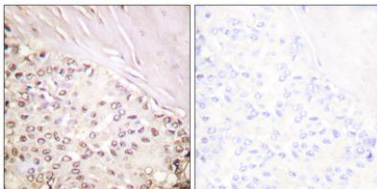
Fanconi anemia complementation group D2(FANCD2) Homo sapiens  
The Fanconi anemia complementation group (FANC) currently includes FANCA, FANCB, FANCC, FANCD1 (also called BRCA2), FANCD2, FANCE, FANCF, FANCG, FANCI, FANCI (also called BRIP1), FANCL, FANCM and FANCN (also called PALB2). The previously defined group FANCI is the same as FANCA. Fanconi anemia is a genetically heterogeneous recessive disorder characterized by cytogenetic instability, hypersensitivity to DNA crosslinking agents, increased chromosomal breakage, and defective DNA repair. The members of the Fanconi anemia complementation group do not share sequence similarity; they are related by their assembly into a common nuclear protein complex. This gene encodes the protein for complementation group D2. This protein is monoubiquitinated in response to DNA damage, resulting in its localization to nuclear foci with other proteins (BRCA1 AND BRCA2) involved in homology-directed DNA repair.



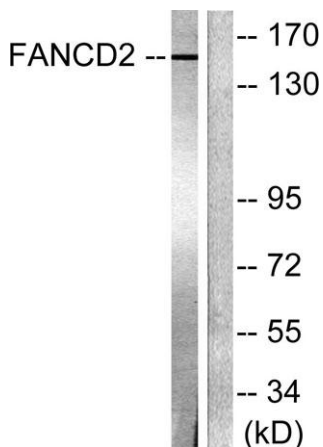
**Western Blot analysis of various cells using FANCD2 Polyclonal Antibody diluted at 1:500 cells nucleus extracted by Minute™ Cytoplasmic and Nuclear Fractionation kit (SC-003, Inventbiotech, MN, USA).**



**Immunohistochemical analysis of paraffin-embedded Human lung cancer. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negative contrl (right) obtained from antibody was pre-absorbed by immunogen peptide.**



**Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using FANCD2 Antibody. The picture on the right is blocked with the synthesized peptide.**



**Western blot analysis of lysates from HT-29 cells, treated with Calyculin A 50ng/ml 30', using FANCD2 Antibody. The lane on the right is blocked with the synthesized peptide.**