Best Tools for immunology Research

FANCD2 (Phospho Thr691) Rabbit pAb

Catalog No :	YP1840
Reactivity :	Human;Mouse;Rat
Applications :	IHC;WB
Target :	FANCD2
Fields :	>>Fanconi anemia pathway
Gene Name :	FANCD2 FACD
Protein Name :	Fanconi anemia group D2 protein (Protein FACD2)
Human Gene Id :	2177
Human Swiss Prot No :	Q9BXW9
Mouse Gene Id :	211651
Mouse Swiss Prot No :	Q80V62
Rat Gene Id :	312641
Rat Swiss Prot No :	Q6IV68
Immunogen :	Synthesized peptide derived from human FANCD2 (Phospho Thr691)
Specificity :	This antibody detects endogenous levels of FANCD2 (Phospho Thr691) Rabbit pAb at Human, Mouse,Rat
Formulation :	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source :	Rabbit,polyclonal
Dilution :	WB 1:500-2000 IHC 1:50-200

Purification : The antibody was affinity-purified from rabbit serum by affinity-chromatography using specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 166kD

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, FANCJ (also called BRIP1), FANCL, FANCM and FANCN (also called PALB2). The previously defined group FANCH 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 monoubiquinated in response to DNA damage, resulting in its localization to nuclear foci with other proteins (BRCA1 AND BRCA2) involved in homology-directed DNA repai

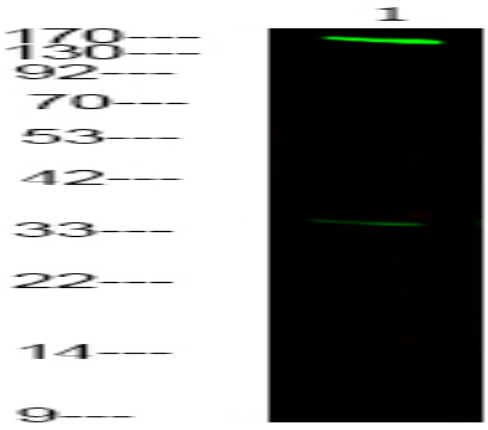
Function : developmental stage:Highly expressed in fetal oocytes, and in hematopoietic cells of the fetal liver and bone marrow (at protein level).,disease:Defects in FANCD2 are a cause of Fanconi anemia (FA) [MIM:227650]. FA is a genetically heterogeneous, autosomal recessive disorder characterized by progressive pancytopenia, a diverse assortment of congenital malformations, and a predisposition to the development of malignancies. At the cellular level it is associated with hypersensitivity to DNA-damaging agents, chromosomal instability (increased chromosome breakage), and defective DNA repair.,domain:The C-terminal 24 residues of isoform 2 are required for its function.,function:Required for maintenance of chromosomal stability. Promotes accurate and efficient pairing of homologs during meiosis. Involved in the repair of DNA double-strand breaks, both by homologous recombination and single-stra

Subcellular Location : 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.

Expression : Highly expressed in germinal center cells of the spleen, tonsil, and reactive lymph nodes, and in the proliferating basal layer of squamous epithelium of tonsil, esophagus, oropharynx, larynx and cervix. Expressed in cytotrophoblastic cells of

the placenta and exocrine cells of the pancreas (at protein level). Highly expressed in testis, where expression is restricted to maturing spermatocytes.

Products Images



Western Blot analysis of mouse spleen ,using primary antibody at 1:1000 dilution. Secondary antibody(catalog#:RS23920) was diluted at 1:10000