FANCD2 polyclonal antibody

Catalog # PAB15934 Size 100 ug

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of FANCD2.
Immunogen	A synthetic peptide corresponding to N-terminus of human FANCD2.
Host	Rabbit
Reactivity	Human, Mouse
Form	Liquid
Recommend Usage	ELISA (1:2000-1:5000) Western Blot (1 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.2 (50% glycerol, 0.01% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

- Western Blot
- Enzyme-linked Immunoabsorbent Assay

Gene Info — FANCD2

Entrez GeneID	2177
Gene Name	FANCD2

Gene Alias	DKFZp762A223, FA-D2, FA4, FACD, FAD, FAD2, FANCD, FLJ23826
Gene Description	Fanconi anemia, complementation group D2
Omim ID	227646
Gene Ontology	Hyperlink
Gene Summary	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 repair. Alternative splicing results in two transcript variants encoding different isoforms. [provided by RefSeq
Other Designations	Fanconi anemia complementation group D2|type 4 Fanconi pancytopenia

Publication Reference

- Explorative study to identify novel candidate genes related to oxaliplatin efficacy and toxicity using a DNA repair array.

  Kweekel DM, Antonini NF, Nortier JW, Punt CJ, Gelderblom H, Guchelaar HJ.

  British Journal of Cancer 2009 Jun; 101(2):357.

- FANCD2-deficient human fibroblasts are hypersensitive to ionising radiation at oxygen concentrations of 0% and 3% but not under normoxic conditions.

  Kuhnert VM, Kachnic LA, Li L, Purschke M, Gheorghiu L, Lee R, Held KD, Willers H.

  International Journal of Radiation Biology 2009 Jun; 85(6):523.

- Impaired FANCD2 monoubiquitination and hypersensitivity to camptothecin uniquely characterize Fanconi anemia complementation group M.

  Singh TR, Bakker ST, Agarwal S, Jansen M, Grassman E, Godthelp BC, Ali AM, Du CH, Rooimans MA, Fan Q, Wahengbam K, Steltenpool J, Andreassen PR, Williams DA, Joenje H, de Winter JP, Meetei AR.

  Blood 2009 May; 114(1):174.

Disease

- Adenocarcinoma
- Ataxia telangiectasia
- Breast cancer
- Breast Neoplasms
- Colorectal Neoplasms
- Genetic Predisposition to Disease
- Head and Neck Neoplasms
- Meningeal Neoplasms
- Meningioma
- Neoplasm Recurrence
- Neoplasms
- Ovarian cancer
- Ovarian Neoplasms
- Pancreatic Neoplasms
- Prostatic Neoplasms
- Tobacco Use Disorder
- Urinary Bladder Neoplasms
- Werner syndrome