

fancd2

Fanconi anaemia (FA) is a disease characterized by progressive bone marrow failure, developmental defects, and cancer predisposition. Hypersensitivity to DNA cross-linking agents such as mitomycin C (MMC) is a characteristic feature of FA cells. Somatic cell hybridization studies have revealed that FA is genetically heterogeneous, comprising at least eleven complementation groups. Nine FA genes have been identified so far: FANCA, FANCB, FANCC, FANCD1/BRCA2, FANCD2, FANCE,

FANCF, FANCG and FANCL. The FA proteins are members of a multi-component pathway that functions to maintain genomic integrity, in which an important role has been assigned to FANCD2, whose activation is one of the key events in the DNA damage response induced by MMC or ionizing irradiation.

Anti-Human FANCD2 (NT), polyclonal

Research Applications

<i>Immunoblotting:</i>	dilute 1:500-1:1000
<i>Immunoprecipitation:</i>	recommended
<i>Immunofluorescence:</i>	recommended; see figure
<i>Immunohistochemistry:</i>	recommended; see figure

Product Description

<i>Host / Ig Type:</i>	rabbit IgG
<i>Purification:</i>	whole antiserum
<i>Immunogen:</i>	GST-fusion protein: AA residues 1-292 of human FANCD2

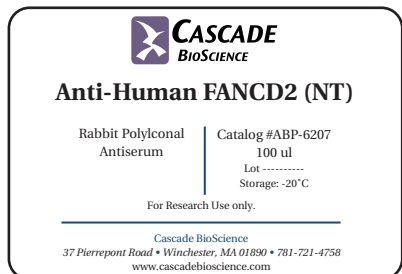


<i>Specificity:</i>	recognizes FANCD2 at 155-162 kDa
<i>Reactivity:</i>	human
<i>Storage:</i>	-20°C
<i>Stability:</i>	2 years

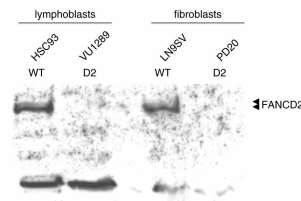
Catalog Information

<i>Catalog Number:</i>	ABP-6207
<i>Volume:</i>	100 microliters
<i>Price:</i>	\$295

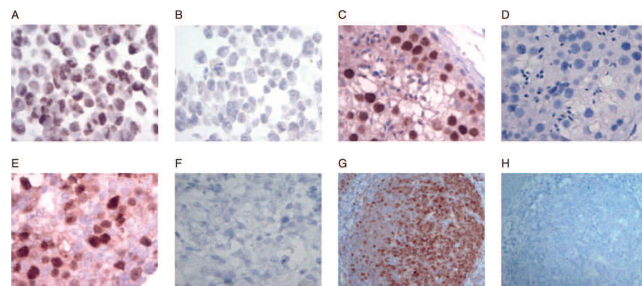
Label Sample



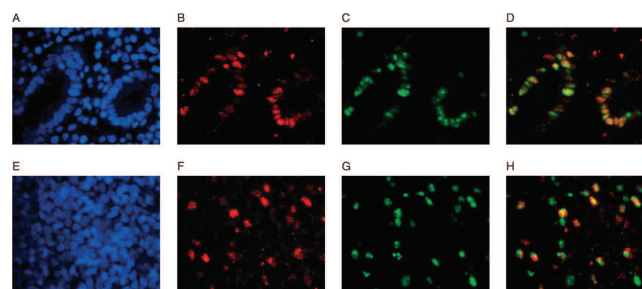
Quality Control and Comparative Analyses



Immunoblotting: Cell lysates of wild-type lymphoblasts (HSC93) and fibroblasts (LN9SV) and FANCD2 mutated lymphoblasts (VU1289) and fibroblasts (PD20) probed with anti-FANCD2, polyclonal (ABM-6207) showing clear FANCD2 protein bands in the wild-type cells and none in the mutated cells (*J. Pathol.* 201:198-203, 2003)



IHC analysis of FANCD2 expression in FA cell lines with anti-FANCD2, polyclonal (Cat. #ABM-6207). FANCD2-expressing cells exhibit dark brown nuclear staining; cell types are specified. Negative controls with secondary antibody alone are specified. (A) Positive immortalized human wild-type fibroblasts. (B) Immortalized FANCD2-negative PD20 fibroblasts. (C) Testis (spermatocytes). (D) Testis (- control). (E) Fetal ovary (oocytes). (F) Fetal ovary (- control). (G) Tonsillar germinal centre (germinal centre B-cells). (H) Tonsillar germinal centre (- control). (*J. Pathol.* 201:198-203, 2003)



Immunofluorescence with anti-FANCD2, polyclonal (ABM-6207) (A-C) triple staining of the adult stomach with DAPI (blue), anti-FANCD2 (red), and anti-Ki-67 (green). (D) Merged image of FANCD2 and Ki-67 staining showing co-expression of FANCD2 and Ki-67 in the proliferating neck cells of the stomach. (E-G) triple staining of a tonsillar germinal centre with DAPI (blue), anti-FANCD2 (red), and anti-Ki-67 (green). (H) Merged image of FANCD2 and Ki-67 staining showing co-expression of FANCD2 and Ki-67 in proliferating germinal centre B-cells (*J. Pathol.* 201:198-203, 2003)

Application Reference

Holzel, M., van Diest, P. J., Bier, P., Wallisch, M., Hoatlin, M. E., Joenje, H. and de Winter, J. P. "FANCD2 protein is expressed in proliferating cells of human tissues that are cancer-prone in Fanconi anaemia" *J. Pathol.* 201: 198-203, 2003



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