fance

Fanconi anaemia *is a chromosome instability syndrome/cancer prone disease (at risk of leukemia and squamous cell carcinoma). FA's prognosis is poor; mean survival is 20 years: patients die of bone marrow failure (infections, haemorrhages), leukemia, or solid cancer.*

It has recently been shown that significant phenotypic differences were found between the various complementation groups. The FA complex is comprised of : FANCA, FANCC, FANCE, FANCF, and FANCG; this complex is only found in the nucleus. FANCA and FANCG form a complex in the cytoplasm, through a N-term FANCA (involving the nuclear localization signal) - FANCG interaction; FANCC join the complex; phosphorylation of FANCA would induce its translocation into the nucleus.This FA complex translocates into the nucleus, where FANCE and FANCF are present; FANCE and FANCF join the complex. The FA complex subsequently interacts with FANCD2 by monoubiquitination of FANCD2 during S phase or following DNA damage. Activated (ubiquinated) FANCD2 (i.e. FANCD2-L), downstream in the FA pathway, will then interact with other proteins involved in DNA repair, possibly BRCA1; after DNA repair, FANCD2 return to the non-ubiquinated form (FANCD2-S).

FANCD2 co-localizes with BRCA1 in DNA damaged-induced loci and in the synaptonemal complex of meotic chromosomes as well.

Anti-Human FANCE, polyclonal

Research Applications

Immunoblotting:	dilute 1:500-1:1000
Immunoprecipitation:	10 microliters per 2 mg/ml sample; antibody IPs over expressed FANCE and endogenous HeLa FANCE
Immunofluorescence:	recommended; see figure

Product Description

Host / Ig Type:	rabbit IgG
Purification:	whole antiserum
Immunogen:	GST-fusion protein: full-length human FANCE

Specificity:	recognizes FANCE at 58 kDa
Reactivity:	human
Storage:	-20˚C
Stability:	2 years

Catalog Information

Catalog Number:	ABP-6213
Volume:	100 microliters
Price:	----------

Label Sample

CASCADE BIOSCIENCE

Anti-Human FANCE

Rabbit Poylconal Antiserum

Catalog #ABP-6213
100 µl
Lot --------
Storage: -20˚C

For Research Use only.

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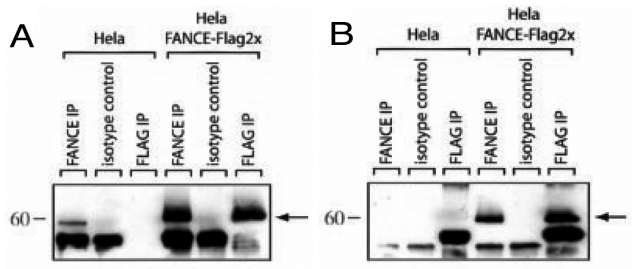
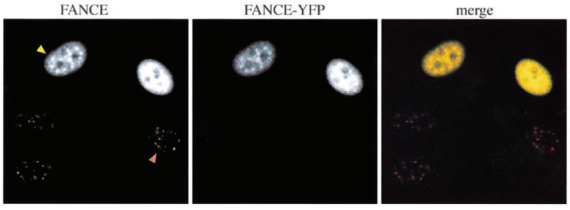
Quality Control and Comparative Analyses



Immunoprecipitation: Detection and analysis of FANCE either immunoprecipitated with FANCE antiserum (ABM-6213) or a Flag monoclonal antibody and then visualized with FANCE antiserum (A) or with Flag monoclonal (B). Anti-FANCE specifically immunopreciptaties and western blots the endogenous HeLa FANCE as well as recombinant FANCE with a C-terminal 2xFlag epitope (FANCE-2xFlag) expressed in HeLA cells. Arrows indicate the migration of FANCE and FANCE-2xFlag.



Immunofluorescence: Subcellular localization of endogenous FANCE as well as FANCE-YFP. Anti-FANCE detects FANCE-YFP transiently expressed in transfected (yellow arrow), as well as native protein in foci of untransfected (red arrow) HeLa cells

Application Reference

Paul Pace, Mark Johnson, Wu Meng Tan, Georgina Mosedale, Chelvin Sng, Maureen Hoatlin, Johan de Winter, Hans Jeonje, Fanni Gergely and K.J. Patel
"FANCE: the link between Fanconi anaemia complex assembly and activity"
EMBO J. 21:3414-3423, 2002

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