

# fanca

**F**anconi 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 FANCA, clone 5G9

### Research Applications

**IP-Western:** use 10 microliters/2 mg/ml sample to IP FANCA from cell lysates; subsequently visualize by immunoblot with polyclonal anti-FANCA (ABP-6201; 1:300-1:1000)

**Western Blot:** antibody will detect endogenous FANCA in IPs and immunoblots of HeLa nuclear extract

**IF/Flow Cytometry:** recommended

### Product Description

**Host / Ig Type:** mouse monoclonal IgG1  
**Purification:** protein G chromatography  
**Immunogen:** synthetic peptide corresponding to amino acids 1436-1455 of human FANCA

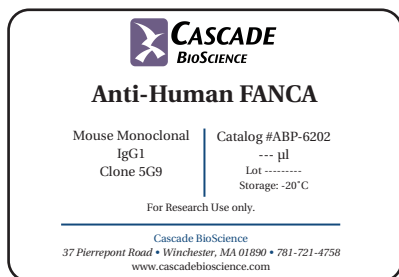


**Specificity:** recognizes FANCA at 163 kDa  
**Reactivity:** human  
**Liquid Carrier:** PBS  
**Storage:** -20°C  
**Stability:** 2 years

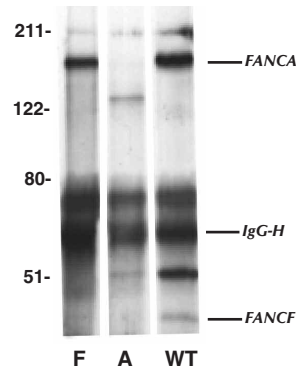
### Catalog Information

**Catalog Number:** ABM-6202  
**Mass/Volume:** 100 µg/100 µl  
**Price:** \$295

### Label Sample



### Quality Control and Comparative Analyses



#### IP-Immunoblot

Cell lysates from wildtype (HSC93), FA-A (HSC72) and FA-F (EUFA698) lymphoblasts were immunoprecipitated with monoclonal anti-FANCA (clone 5G9; aa 1436-1455; Cat. #ABM-6202). FANCA was subsequently visualized using polyclonal anti-FANCA (Cat. #ABP-6201)

### Application References

de Winter, J.P., van Der Weel, L., de Groot, J., Stone, S., Waisfisz, Q., Arwert, E., Scheper R. J., Kruyt, F.A., Hoatlin, M. E. and Joenje, H. "The Fanconi anemia protein FANCF forms a nuclear complex with FANCA, FANCC and FANCG". Hum Mol Genet. 9:2665-74, 2000.

Waisfisz, Q., de Winter, J. P., Kruyt, F. A. E., de Groot, J., van der Weel, L., Dijkmans, L. M., Zhi, Y., Arwert, E., Scheper, R. J., Youssoufian, H., Hoatlin, M. E. and Joenje, H. "A physical complex of the Fanconi anemia proteins FANCG/XRCC9 and FANCA" PNAS (USA) 96: 10320-10325, 1999.

Meetei, A. R., Sechi, S., Wallisch, M., Yang, D., Young, M. K., Joenje, H., Hoatlin, M. E. and Wang, W "A Multiprotein Nuclear Complex Connects Fanconi Anemia and Bloom Syndrome" MCB 23:3417-3426, 2003



Winchester, Massachusetts 01890  
(781) 721-4758  
www.cascadebioscience.com