fanca

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 FANCA, polyclonal

Research Applications

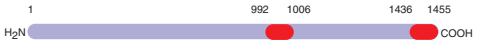
IP-Western: use 10 microliters/sample to IP FANCA from cell lysates; subsequently visualize by immunoblot (1:500-1:1000 dilution); antibody will detect endogenous FANCA in westerns of HeLa cell nuclear extracts

Product Description

Host / Ig Type: rabbit IgG

Purification: whole antiserum

Immunogen: 2 synthetic peptides corresponding to amino acids 992-1006 and 1436-1455 of human FANCA



Specificity: recognizes human FANCA at 163 kDa

Reactivity: human

Storage: -20˚C

Stability: 2 years

Catalog Information

Catalog Number:	ABP-6201
Volume:	100 microliters
Price:	$295

Label Sample

CASCADE BIOSCIENCE

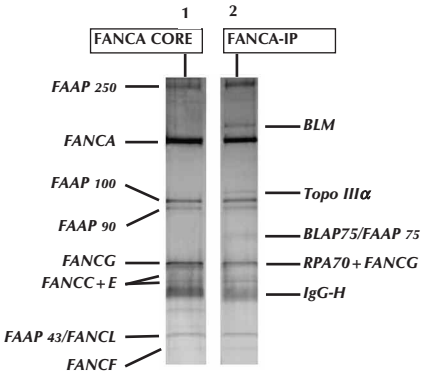
Anti-Human FANCA

Rabbit Polyclonal IgG | Catalog #ABM-6201
100 µl
Lot --------
Storage: -20˚C

For Research Use only.

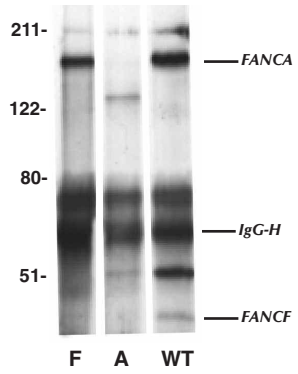
Cascade BioScience Inc.
37 Pierrepont Road • Winchester, MA 01890 • 781-721-4758
www.cascadebioscience.com

Quality Control and Comparative Analyses



Silver-stained SDS-PAGE Analysis of HeLa Nuclear Extract Immunoprecipitate

BRAFT complex components immunoprecipitated (IP) by polyclonal anti-FANCA (Cat. #ABP-6201) (lane 2). The Fanconi anemia core complex was obtained by IP with anti-FANCA under high stringency washing conditions (0.75M salt), removing BLM, Topo III-alpha, BLAP75 and RPA70 as indicated. (lane 1) (**Meetei et al., Nature Genetics 35:170, 2003**)



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 polylconal anti-FANCA (Cat. #ABP-6201) (**de Winter et al., Hu. Mol. Gen.9: 2665: 2000**)

Application References

Waisfisz, Q., de Winter, J. P., Kruyt, F. A. E., de Groot, J., van der Weel, L., Dijkmans, L. M., Zhi, Y., Arwert, F., 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.

Waisfisz, Q., Morgan, N. V., Savino, M., de Winter, J. P., van Berkel, C. G., Hoatlin, M. E., Ianzano, L., Gibson, R. A., Arwert, F., Savoia, A., Mathew, C. G., Pronk, J. C. and Joenje, H. **"Spontaneous functional correction of homozygous fanconi anaemia alleles reveals novel mechanistic basis for reverse mosaicism."** Nat. Genet. 22:379-83, 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

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