

fance

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 FANCC, clone 8F3

Research Applications

- Immunoblotting:** 1-5 micrograms/m in cells over expressing FANCC
- Immunoprecipitation:** use 10 microliters/2 mg/ml sample to IP Flag-tagged FANCC
- Immunofluorescence:** recommended; see figure

Product Description

- Host / Ig Type:** mouse monoclonal IgG2b
- Purification:** protein A chromatography
- Immunogen:** synthetic peptide: AA residues 546-558 of human FANCC

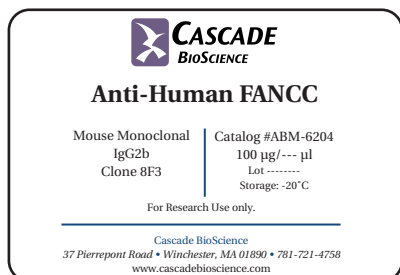


- Specificity:** recognizes wild type FANCC; 63 kDa; does not detect mutant form L554P
- Reactivity:** human
- Liquid Carrier:** PBS
- Storage:** -20°C
- Stability:** 2 years

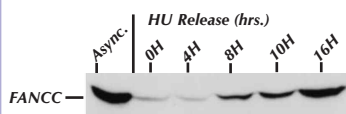
Catalog Information

- Catalog Number:** ABM-6204
- Mass/Volume:** 100 µg/100 µl
- Price:** \$295

Label Sample

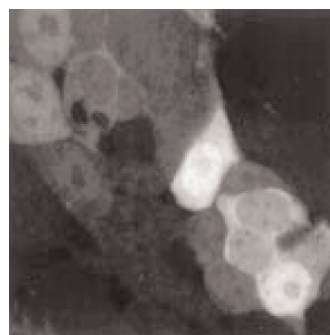


Quality Control and Comparative Analyses



Immunoblotting:

Hydroxyurea (HU) synchronized 293 FANCC E2 cells (G1/S boundary). Whole-cell lysates were prepared at the indicated times after release and probed using anti-FANCC, clone 8F3, (Cat. #ABM-6204).



Immunofluorescence:

293 FANCC E2 cells were stained with monoclonal anti-FANCC (Cat. #ABM-6204) and a secondary Oregon green-labeled goat anti-mouse antibody.

Application References

Heinrich, M. C., Silvey, K. V., Stone, S., Zigler, A. J., Griffith, D. J., Montalto, M., Chai, L., Zhi, Y. and Hoatlin, M. E. "Post transcriptional cell cycle-dependent regulation of human FANCC expression". Blood 95:3970-3977, 2000.

Hoatlin, M. E., Zhi, Y., Ball, H., Silvey, K., Melnick, A., Stone, S., Arai, S., Hawe, N., Owen, G., Zelent, A. and Licht, J. D. "A novel BTB/POZ transcriptional repressor protein interacts with the Fanconi anemia group C protein and PLZF". Blood 94:3737-3747, 1999

Xie, X., de Winter, J. P., Waisfisz, Q., Nieuwint, A., Scheper, R., Arwert, F. M., Hoatlin, M. E., Ossenkoppele, A., Schuurhuis, G. and Joenje, H. "Aberrant Fanconi anemia protein profiles in acute myeloid leukemia cells." Br. J. Hematology 111:1057-1064, 2000.



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