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# FANCG (h): 293T Lysate: sc-170176

## BACKGROUND

Fanconi anemia (FA) is an autosomal recessive disorder characterized by bone marrow failure, birth defects, and chromosomal instability. At the cellular level, FA is characterized by spontaneous chromosomal breakage and a unique hypersensitivity to DNA cross-linking agents. At least eight complementation groups (A-G) have been identified and six FA genes (for subtypes A, C, D2, E, F and G) have been cloned. The FA proteins lack sequence homologies or motifs that could point to a molecular function. The cellular accumulation of FA proteins, including FANCA and FANCG, is subject to regulation by TNF $\alpha$  signaling. Phosphorylation of FANCG (fanconi anemia complementation group) proteins is thought to be important for the function of the FA pathway. Phosphorylation of Serine 7 in FANCG is functionally important in the FA pathway. FANCG is localized majorly in the nucleus and minorly in the cytoplasm, and is highly expressed in testis and thymus.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: FANCG (human) mapping to 9p13.3.

## PRODUCT

FANCG (h): 293T Lysate represents a lysate of human FANCG transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## APPLICATIONS

FANCG (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive FANCG antibodies. Recommended use: 10-20  $\mu$ l per lane.

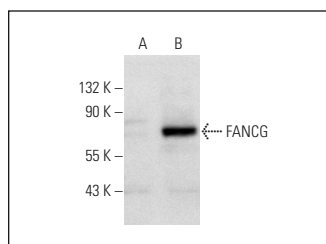
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

FANCG (75-A): sc-100740 is recommended as a positive control antibody for Western Blot analysis of enhanced human FANCG expression in FANCG transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## DATA



FANCG (75-A): sc-100740. Western blot analysis of FANCG expression in non-transfected: sc-117752 (A) and human FANCG transfected: sc-170176 (B) 293T whole cell lysates.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.