

**Datasheet for 600-401-670****FANCA Antibody****Overview**

|                      |                                                  |
|----------------------|--------------------------------------------------|
| <b>Description:</b>  | Anti-Human FANCA (RABBIT) Antibody - 600-401-670 |
| <b>Item No.:</b>     | 600-401-670                                      |
| <b>Size:</b>         | 100 µg                                           |
| <b>Applications:</b> | ELISA, WB                                        |
| <b>Reactivity:</b>   | Human                                            |
| <b>Host Species:</b> | Rabbit                                           |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>   | FANCA (also called Protein FACA or Fanconi anemia group A protein) is involved in DNA repair, perhaps specifically with post-replication repair or a cell cycle checkpoint function. FANCA may also be implicated in interstrand DNA cross-link repair and in the maintenance of normal chromosome stability. The Fanconi anemia complementation group (FANC) currently includes FANCA, FANCB, FANCC, FANCD1 (also called BRCA2), FANCD2, FANCE, FANCF, FANCG, and FANCL. The previously defined group FANCH is the same as FANCA. Fanconi anemia is a genetically heterogeneous recessive disorder characterized by cytogenetic instability, hypersensitivity to DNA crosslinking agents, increased chromosomal breakage, and defective DNA repair. The members of the Fanconi anemia complementation group do not share sequence similarity; they are related by their assembly into a common nuclear protein complex. This gene encodes the protein for complementation group A. Diseases associated with FANCA include Fanconi anemia complementation group a and Congenital Hypoplastic Anemia. |
| <b>Synonyms:</b>     | rabbit anti-FANCA antibody, FANC-A, FANC A, Fanconi anemia group A protein, FAA antibody, FACA antibody, FAH antibody, FANCH antibody                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Host Species:</b> | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

**Target Details**

|                    |       |
|--------------------|-------|
| <b>Gene Name:</b>  | FANCA |
| <b>Reactivity:</b> | Human |

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|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Immunogen Type:</b>     | Conjugated Peptide                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Immunogen:</b>          | This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to amino acids 995-1009 of human FANCA protein.                                                                                                                                                                                                |
| <b>Purity/Specificity:</b> | This affinity-purified antibody is directed against human FANCA protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest cross reactivity with FANCA protein from human and chimpanzee based on 100% homology with the immunizing sequence. Reactivity against homologues from other sources is not known. |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"><li>• <a href="#">NCBI - 66880553</a></li><li>• <a href="#">UniProtKB - O15360</a></li><li>• <a href="#">GeneID - 2175</a></li></ul>                                                                                                                                                                                                                        |

## Application Details

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|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tested Applications:</b> | ELISA, WB                                                                                                                                                                                                                                                                                                               |
| <b>Application Note:</b>    | This affinity purified antibody has been tested for use in ELISA and by western blot. Specific conditions for reactivity should be optimized by the end user. Expect a main band at approximately 163 kDa in size corresponding to FANCA by western blotting in the appropriate cell lysate or extract or human tissue. |
| <b>Assay Dilutions:</b>     | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                                                                                                         |
| <b>ELISA:</b>               | 1:15,000 - 1:60,000                                                                                                                                                                                                                                                                                                     |
| <b>WB:</b>                  | 1:500 - 1:3,000                                                                                                                                                                                                                                                                                                         |

## Formulation

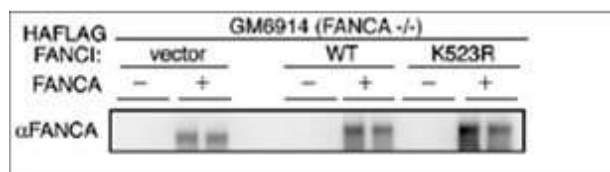
|                        |                                                            |
|------------------------|------------------------------------------------------------|
| <b>Physical State:</b> | Liquid (sterile filtered)                                  |
| <b>Concentration:</b>  | 2.2 mg/mL by UV absorbance at 280 nm                       |
| <b>Buffer:</b>         | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 |
| <b>Preservative:</b>   | 0.01% (w/v) Sodium Azide                                   |
| <b>Stabilizer:</b>     | None                                                       |

## Shipping & Handling

|                            |         |
|----------------------------|---------|
| <b>Shipping Condition:</b> | Dry Ice |
|----------------------------|---------|

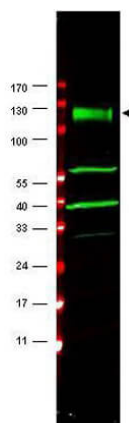
|                           |                                                                                                                                                                                                                                                                                                                                               |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Storage Condition:</b> | Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use. |
| <b>Expiration:</b>        | Expiration date is one (1) year from date of receipt.                                                                                                                                                                                                                                                                                         |

## Images



### Western Blot

Western blot using Rockland's affinity purified anti-FANCA antibody shows detection of FANCA only in FANCA transfected GM6914 cell lysates. No staining is seen in lysates prepared from FANCA (-/-) cells in the absence of FANCA transfection. Modified from Smogorzewska et al (2007) Cell 129, 289-301.



### Western Blot

Western blot using Rockland's affinity purified anti-FANCA antibody shows detection of a band at ~133 kDa (arrowhead) corresponding to FANCA in HeLa whole cell lysates (p/n W09-000-364). The identity of the lower molecular weight bands is unknown but may represent breakdown products. Approximately 35μg of lysate was separated by 4-20% Tris Glycine SDS-PAGE. After blocking, the membrane was probed for 2 h at room temperature with the primary antibody diluted to 1:1,500. The membrane was washed and reacted with a 1:10,000 dilution of IRDye™800 conjugated Gt-a-Rabbit IgG [H&L] (p/n 611-132-122) for 45 min at room temperature (800 nm channel, green). Molecular weight estimation was made by comparison to prestained MW markers indicated at left (700 nm channel, red). IRDye™800 fluorescence images were captured using the Odyssey® Infrared Imaging System developed by LI-COR. IRDye is a trademark of LI-COR, Inc. Other detection systems will yield similar results.

## Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.