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Datasheet for 600-401-671

FANCG Antibody

Overview

Description:	Anti-Human FANCG (RABBIT) Antibody - 600-401-671
Item No.:	600-401-671
Size:	100 µg
Applications:	ELISA, IHC, WB
Reactivity:	Human, Mouse
Host Species:	Rabbit

Product Details

Background:	FANCG (also called Protein FACG or DNA-repair protein XRCC9) is involved in DNA repair, perhaps specifically with post-replication repair or a cell cycle checkpoint function. FANCG may also be implicated in interstrand DNA cross-link repair and in the maintenance of normal chromosome stability. This protein may also function as a tumor suppressor gene. FANCG belongs to the multi-subunit Fanconi Anemia (FA) complex composed of FANCA, FANCB, FANCC, FANCE, FANCF, FANCG, FANCL/PHF9 and FANCM. FANCG contains a 5-prime GC-rich untranslated region characteristic of housekeeping genes. The putative 622-amino acid protein has a leucine-zipper motif at its N-terminus. FANCG is mainly found within the nucleus although some protein is localized in the cytoplasm. This protein is highly expressed in testis and thymus and is also found in lymphoblasts. 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 G.
Synonyms:	rabbit anti-FANCG antibody, FANC-G, FANC G, Fanconi anemia group G protein, DNA repair protein XRCC9 antibody, Fanconi anaemia complementation group G antibody, Protein FACG antibody
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	FANCG
Reactivity:	Human, Mouse
Immunogen Type:	Conjugated Peptide
Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to a N-terminal region near amino acids 1 -25 of human FANCG protein.
Purity/Specificity:	This affinity-purified antibody is directed against human FANCG protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest cross reactivity with FANCG protein from human and chimpanzee based on 100% homology with the immunizing sequence. Reactivity against homologues from other sources is not known.
Relevant Links:	• UniProtKB - O15287 • NCBI - 4759336 • GeneID - 2189

Application Details

Tested Applications:	ELISA, IHC, WB
Application Note:	This affinity purified antibody has been tested for use in ELISA, immunohistochemistry and by western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 69 kDa in size corresponding to FANCG by western blotting in the appropriate human tissue.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:50,000
IHC:	1:500 - 1:2,000
WB:	1:500 - 1:2,000

Formulation

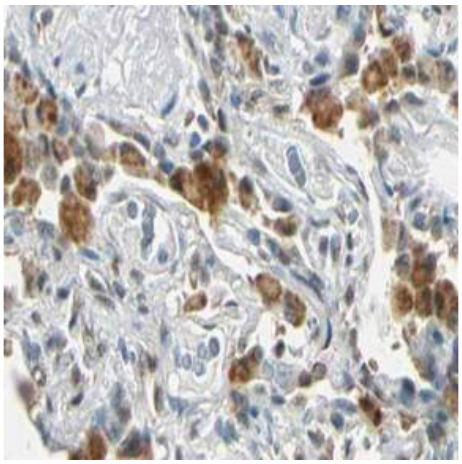
Physical State:	Liquid (sterile filtered)
Concentration:	0.93 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

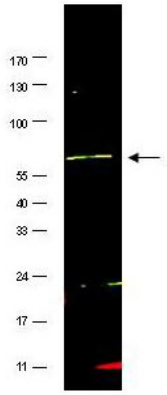
Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	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.
Expiration:	Expiration date is one (1) year from date of receipt.

Images

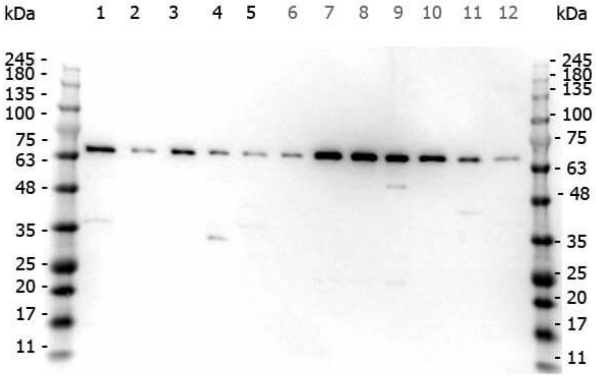


Immunohistochemistry
Rockland's Affinity Purified anti-FANCG antibody shows strong nuclear and cytoplasmic staining of cells of macrophages in human lung tissue. Tissue was formalin-fixed and paraffin embedded. Brown color indicates presence of protein, blue color shows cell nuclei. Personal Communication, Kenneth Wester, www.proteinatlas.org, Uppsala, Sweden.



Western Blot

Western blot using Rockland's affinity purified anti-FANCG antibody shows detection of a band at ~69 kDa (arrowhead) corresponding to FANCG present in a HeLa whole cell lysate (p/n W09-000-364). Approximately 35µg of lysate was separated by 4-20% Tris Glycine SDS-PAGE. After blocking, the membrane was probed overnight at 4°C with the primary antibody diluted to 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). IRDye800 fluorescence image was 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.



Western Blot

Western Blot of Rabbit anti-FANCG antibody. Marker: Opal Pre-stained ladder (p/n MB-210-0500). Lane 1: HEK293 lysate (p/n W09-000-365). Lane 2: HeLa Lysate (p/n W09-000-364). Lane 3: MCF-7 Lysate (p/n W09-000-360). Lane 4: Jurkat Lysate (p/n W09-000-370). Lane 5: A431 Lysate (p/n W09-000-361). Lane 6: A549 Lysate (p/n W09-001-372). Lane 7: LNCap Lysate (p/n W09-001-GJ9). Lane 8: MOLT-4 Lysate (p/n W09-001-GK2). Lane 9: Ramos Lysate (p/n W09-000-GK4). Lane 10: Raji Lysate (p/n W09-001-368). Lane 11: A-172 Lysate (p/n W09-001-GL5). Lane 12: NIH/3T3 Lysate (p/n W10-000-358). Load: 10 µg per lane. Primary antibody: FANCG antibody at 1:1,000 overnight at 4C. Secondary antibody: Peroxidase rabbit secondary antibody (p/n 611-103-122) at 1:30,000 for 60 min at RT. Blocking Buffer: 1% Casein-TTBS (p/n MB-082) for 30 min at RT. Predicted/Observed size: 69 kDa for FANCG.

Disclaimer

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