

## FANCA (1412:1431) Antibody Data Sheet

**HGNC:** FA complementation group A

**Antibody ID:** 0401

**Animal:** R2500, R2501, (R2502- *no longer distributed as of 8.27.2021*)

**Synonyms:** "FANCA-1"

**Type:** Affinity Purified Rabbit Polyclonal

**Antigen:** 1412:1431

**Peptide Sequence:** KKSFSHVAELLADRGDCDPE

**Assay:** WB

**Confirmed Species Cross-Reactivity:** Human

**Supplier:** Open Biosystems

**Project Number:** 0401

**Individual Animal Serum/Unpurified Serum Available:** YES

**Storage:** This antibody is stored in PBS should be kept at 4°C. Avoid freeze/thaws.

**Feedback Required:**

All users are required to submit use-data. Please refer to the [FARM Antibodies page](#) for instructions on how to submit.

**Citing FARM:**

All users are required to cite FARM in publications. Please refer to the [FARM Publications page](#) for instructions on how to cite.

**Experimental Set-Up:**

Cell Line: FA-A fibroblasts (6914 pMMP-Empty, 6914 pMMP-FANCA)

Control(s): Deficient in FANCA (6914 + pMMP Empty)

Treatment: 200 nM Mitomycin C (MMC), 0.4 μM Aphidicolin (APH)

Protein: FANCA

**Western Blot Conditions:**

Samples Loaded: Whole cell lysates were prepared in 2% SDS lysis buffer and 10% beta mercaptoethanol. 30 μg of protein loaded.

SDS Page: 3-8% Tris-Acetate Gel (1.5mm x 10 well), Invitrogen

Transfer Condition: Semi-Dry Transfer; 25 V, 1 hour

Detection: Chemiluminescence (Clarity Western ECL Substrate)

	Primary Antibody: <b>FANCA (1412:1431)</b>	Secondary Antibody: <b>ECL Anti-Rabbit IgG (NA934V)</b>
Source	Rabbit	Anti-Rabbit IgG, Horseradish Peroxidase linked whole antibody (from donkey)
Concentration	-	-
Dilution	1:2000	1:5000
Final Concentration		
Incubation Temp/Time	overnight, 4°C	Room Temperature, 1 hour

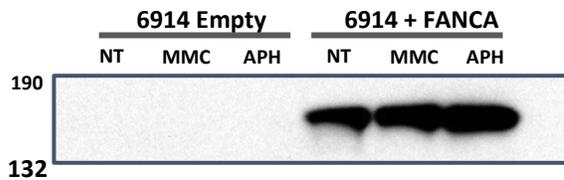
**Results:**

6914 Empty/ 6914 + FANCA

200 nM MMC 24hr

0.4 μM APH 24hr

Whole Cell Extracts

**Interpretation:**

Western Blot detection of FANCA in 6914 pMMP-FANCA whole cell lysates. Absent detection of FANCA in 6914 pMMP-EMPTY cells.

Last Updated: December 2024

### Experimental Set-Up:

Cell Line: FA-A fibroblasts (6914 pMMP-Empty, 6914 pMMP-FANCA)

Control(s): Deficient in FANCA (6914 + pMMP Empty)

Treatment: 100 nM Mitomycin C (MMC), 1.0  $\mu$ M Aphidicolin (APH), 40 J/m<sup>2</sup> UV

Protein: FANCA

### Western Blot Conditions:

Samples Loaded: Whole cell lysates were prepared in 2% SDS lysis buffer and 10% beta mercaptoethanol. 30  $\mu$ g of protein loaded.

SDS Page: 3-8% Tris-Acetate Gel (1.5mm x 10 well), Invitrogen

Transfer Condition: Semi-Dry Transfer; 25 V, 1 hour

Detection: Chemiluminescence (Clarity Western ECL Substrate)

	Primary Antibody: <b>FANCA (1412:1431)</b>	Secondary Antibody: <b>ECL Anti-Rabbit IgG (NA934V)</b>
Source	Rabbit	Anti-Rabbit IgG, Horseradish Peroxidase linked whole antibody (from donkey)
Concentration	-	-
Dilution	1:2000	1:5000
Final Concentration		
Incubation Temp/Time	overnight, 4°C	Room Temperature, 1 hour

### Results:

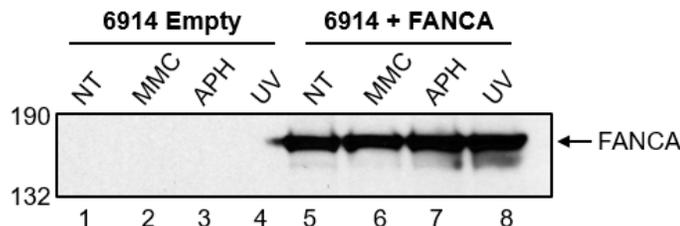
**6914 Empty / 6914 + FANCA**

**100 nM MMC 24 h**

**1.0  $\mu$ M APH 24 h**

**40 J/m<sup>2</sup> UV 4 h**

**Whole Cell Extracts**

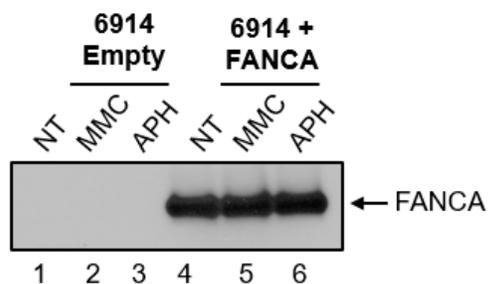


Last Updated: December 2024

6914 Empty / 6914 + FANCA  
100 nM MMC  
Nuclear Extracts

6914 Empty		6914 + FANCA	
NT	MMC	NT	MMC

6914 Empty / 6914 + FANCA  
100 nM MMC 24 h  
0.4  $\mu$ M APH 24 h  
Whole Cell Extracts



**Interpretation:**

Western Blot detection of FANCA in 6914 pMMP-FANCA whole cell lysates. Absent detection of FANCA in 6914 pMMP-EMPTY cells.

Use-data donated by Dr Sertorio at Cincinnati Children's Hospital Medical Center [Mathieu.Sertorio@cchmc.org](mailto:Mathieu.Sertorio@cchmc.org)

### **Experimental Set-Up:**

Cell Line: VU1131 FANCC and S91, VU1365 FANCA and S91

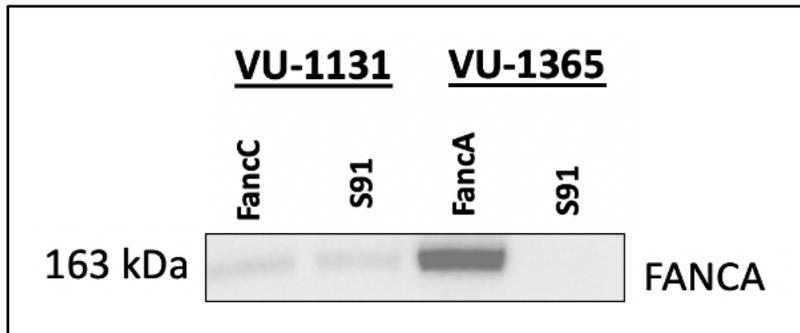
### **Western Blot Conditions:**

Samples Loaded: Whole cell lysates were prepared and 30 µg of protein loaded

Detection: Chemiluminescence (Clarity Western ECL Substrate)

	Primary Antibody: FANCA (1412:1431)	Secondary Antibody:
Source	Rabbit	ECL Anti-Rabbit HRP Secondary
Concentration		
Dilution	1:1000	1:5000
Final Concentration		
Incubation Temp/Time	Overnight, 4°C	Room Temperature, 1 hour

### **Results:**



1. VU1131 are FancC deficient cell lines and VU1365 are FancA deficient cell lines.
2. S91 is the empty expression vector. When it's indicated S91 it is the deficient cells, and when the FA protein is indicated, the cells re-express the deficient FA gene.

### **Interpretation:**

Western Blot detection of FANCA in FANCA proficient whole cell lysates. Absent detection of FANCA in FANCA deficient cells.

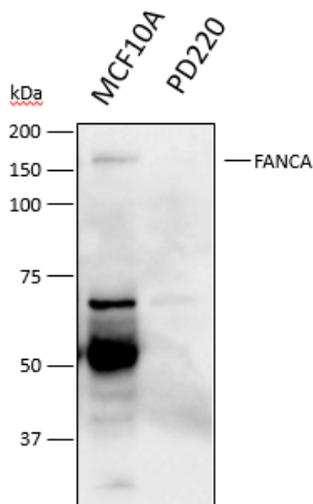
**Last Updated:** December 2024

**FANC protein:** FANCA-1, N-Term

**FANC antibody:** R2500

**Application:** Western

**Submitter/date:** Antonia Nemece [Florida State University College of Medicine]/ 12.4.2017



Cells were lysed in boiling SDS lysis buffer. Lysates were resolved on 8% SDS-PAGE gel and transferred to PVDF membrane. FANCA antibody was added at a 1:2000 dilution in 5% milk and incubated overnight at 4°C.

**Last Updated:** December 2024

**Donating Investigators:**

Aimin Peng ([penga@unc.edu](mailto:penga@unc.edu)) and Odjo Germain Gouttia ([ggouttia@unc.edu](mailto:ggouttia@unc.edu)) at University of North Carolina  
12/16/2024

**Experimental Set-Up:**

Cell Line: **HaCaT**

Control(s):

Treatment:

Protein: **FANC A (1412:1431)**

**Western Blot Conditions:**

Samples Loaded: **10µl SDS sample buffer**

SDS Page: **Yes**

Transfer Condition: wet transfer

Detection:

	Primary Antibody: <b>NAME</b>	Secondary Antibody: <b>NAME</b>
Source	FARF	
Concentration	0.26 mg/ml	
Dilution	1:1000	7:1000
Final Concentration	0.26ug/ml	0.000181ug/ml
Incubation Temp/Time	Overnight at 4 degrees Celsius	1 hour room temperature

**Results:**

FANC A  = 250  
= 150

**Interpretation:**

**Last Updated:** December 2024