

14-3-3 Pan Polyclonal Antibody

Product Details	
Size	200 µg
Species Reactivity	Bovine, C. elegans, Human, Mouse, Rat, Xenopus
Published Species	Fruit fly, Plant, Mouse, Human
Host/Isotope	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Unconjugated
Immunogen	A 20 amino acid synthetic peptide derived from the N-terminus of the human 14-3-3 beta/alpha protein.
Form	Liquid
Concentration	0.25 mg/mL
Purification	Antigen affinity chromatography
Storage buffer	PBS, pH 7.4
Contains	0.1% sodium azide
Storage Conditions	Maintain refrigerated at 2-8°C for up to 1 month. For long term storage store at -20°C
RRID	AB_2533894

Applications	Tested	Dilution	Published
Western Blot (WB)	✓	2 µg/mL	6 Publications
Immunocytochemistry (ICC)	✓	2 µg/mL	1 Publication
Immunofluorescence (IF)	✓	2 µg/mL	1 Publication
ELISA (ELISA)	✓	0.1-1.0 µg/mL	

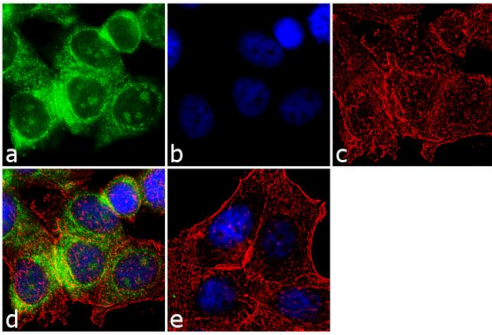
Product Specific Information

This antibody is broadly reactive with members of the 14-3-3 family of proteins (~29-32 kDa). With the exception of a single conserved amino acid change, this sequence is identical in the delta and zeta isoforms. Three and four conserved amino acid differences are found in the tau and gamma isoforms, respectively.

Product Images For 14-3-3 Pan Polyclonal Antibody

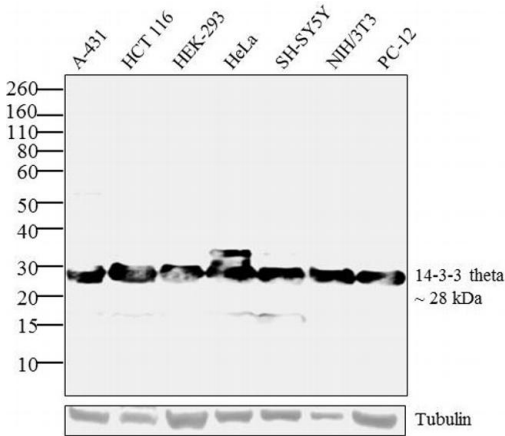
14-3-3 Pan Antibody (51-0700) in IF

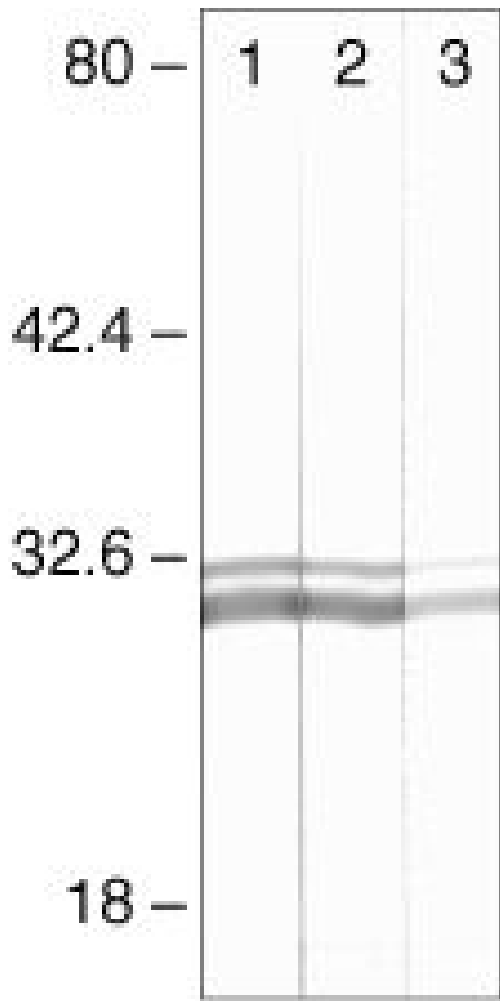
Immunofluorescence analysis of 14-3-3 theta was performed using 70% confluent log phase MCF-7 cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, and blocked with 1% BSA for 1 hour at room temperature. The cells were labeled with 14-3-3 theta Rabbit Polyclonal Antibody (Product # 51-0700) at 2 µg/mL in 0.1% BSA and incubated for 3 hours at room temperature and then labeled with Goat anti-Rabbit IgG (H+L) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A27034) at a dilution of 1:2000 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: red) was stained with Alexa Fluor® 555 Rhodamine Phalloidin (Product # R415, 1:300). Panel d represents the merged image showing cytoplasmic localization. Panel e shows the no primary antibody control. The images were captured at 60X magnification.



14-3-3 Pan Antibody (51-0700) in WB

Western blot analysis was performed on whole cell extracts (30 µg) of A-431 (Lane 1), HCT 116 (Lane 2), HEK-293 (Lane 3), HeLa (Lane 4), SH-SY5Y (Lane 5), NIH /3T3 (Lane 6) and PC-12 (Lane 7). The blots were probed with Anti- 14-3-3 theta Rabbit Polyclonal Antibody (Product # 51-0700, 2 µg/mL) and detected by chemiluminescence using Goat anti-Rabbit IgG (H+L) Superclonal™ Secondary Antibody, HRP conjugate (Product # A27036, 0.4 µg/mL, 1:2500 dilution). A ~ 28 kDa band corresponding to 14-3-3 theta was observed across cell lines tested. Known quantity of protein samples were electrophoresed using Novex® NuPAGE® 4-12 % Bis-Tris gel (Product # NP0321BOX), XCell SureLock™ Electrophoresis System (Product # EI0002) and Novex® Sharp Pre-Stained Protein Standard (Product # LC5800). Resolved proteins were then transferred onto a nitrocellulose membrane with iBlot® 2 Dry Blotting System (Product # IB21001). The membrane was probed with the relevant primary and secondary Antibody following blocking with 5 % skimmed milk. Chemiluminescent detection was performed using Pierce™ ECL Western Blotting Substrate (Product # 32106).





14-3-3 Pan Antibody (51-0700) in WB

Western blot analysis of HeLa cells using Rb anti-14-3-3 (Product # 51-0700). Lane 1: 1 µg/mL, Lane 2: 0.5, g/mL, Lane 3: 0.1 µg/mL

[View more figures on thermofisher.com](https://www.thermofisher.com)

8 References

Western Blot (6)

International journal of molecular sciences

Protein Phosphatase (*PP2C9*) Induces Protein Expression Differentially to Mediate Nitrogen Utilization Efficiency in Rice under Nitrogen-Deficient Condition.

Authors: Waqas M,Feng S,Amjad H,Letuma P,Zhan W,Li Z,Fang C,Arafat Y,Khan MU,Tayyab M,Lin W

Species

Plant
Not Applicable

Dilution

Not Cited
Not Cited

Year

2018

Nature communications

14-3-3 proteins regulate Tctp-Rheb interaction for organ growth in *Drosophila*.

"51-0700 was used in immunocytochemistry and western blot to analyze organ growth in drosophila regulating the Tctp-Rheb interaction by 14-3-3 proteins"

Authors: Le TP,Vuong LT,Kim AR,Hsu YC,Choi KW

Species

Fruit fly
Not Applicable

Dilution

Not Cited
1:200

Year

2016

[View more WB references on thermofisher.com](#)

Immunocytochemistry (1)

Nature communications

14-3-3 proteins regulate Tctp-Rheb interaction for organ growth in *Drosophila*.

"51-0700 was used in immunocytochemistry and western blot to analyze organ growth in drosophila regulating the Tctp-Rheb interaction by 14-3-3 proteins"

Authors: Le TP,Vuong LT,Kim AR,Hsu YC,Choi KW

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Fruit fly
Not Applicable

Dilution

Not Cited
1:200

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2016

Immunofluorescence (1)

Nature communications

14-3-3 proteins regulate Tctp-Rheb interaction for organ growth in *Drosophila*.

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Authors: Le TP,Vuong LT,Kim AR,Hsu YC,Choi KW

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Not Applicable

Dilution

Not Cited
1:200

Year

2016

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