

## Monoclonal anti-human 14-3-3 epsilon antibody (clone AT4F8)

Mouse IgG<sub>2b</sub>, κ

Cat. No. IBATGA0124

**Immunogen:** Recombinant human 14-3-3 epsilon (1-255aa) purified from *E. coli*

**NCBI Accession No.:** NP\_006752

**Isotype:** Mouse IgG<sub>2b</sub> heavy chain and κ light chain

**Clone:** Anti-human 14-3-3 epsilon mAb, clone AT4F8, is derived from hybridization of mouse F0 myeloma cells with spleen cells from BALB/c mice immunized with a recombinant human 14-3-3 epsilon protein.

**Description:** The 14-3-3 family of proteins plays a key regulatory role in signal transduction, checkpoint control, apoptotic and nutrient-sensing pathways. 14-3-3 proteins are highly conserved and ubiquitously expressed. There are at least seven isoforms, β, γ, ε, σ, ζ, τ and η that have been identified in mammals. The 14-3-3 epsilon, a subtype of the 14-3-3 family of proteins, was thought to be brain and neuron-specific. It has been shown to interact with CDC25 phosphatases, RAF1 and IRS1 proteins, suggesting its role in diverse biochemical activities related to signal transduction, such as cell division and regulation of insulin sensitivity. It has also been implicated in the pathogenesis of small cell lung cancer.

**Concentration:** 1 mg/ml

**Form:** Liquid. In Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% Glycerol

**Storage:** Can be stored at +4C. For long term storage, aliquot and store at -20C. Avoid repeated freezing and thawing cycles.

**Usage:** The antibody has been tested by ELISA, Western blot analysis, Flow cytometry and ICC/IF to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.

**Application:** ELISA, WB, Flow cytometry, ICC/IF

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.



Manufactured for:

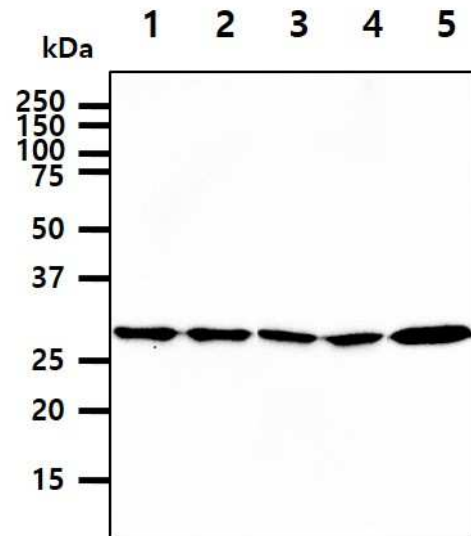
Immuno-Biological Laboratories, Inc. (IBL-America)  
8201 Central Ave. NE, Suite P, Minneapolis, Minnesota 55432, USA  
Phone: (888) 523-1246 Fax.: (763) 780-2988  
Email: [info@ibl-america.com](mailto:info@ibl-america.com) Web: [www.ibl-america.com](http://www.ibl-america.com)

# Product information

## Western blot analysis

The cell lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human 14-3-3 epsilon antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

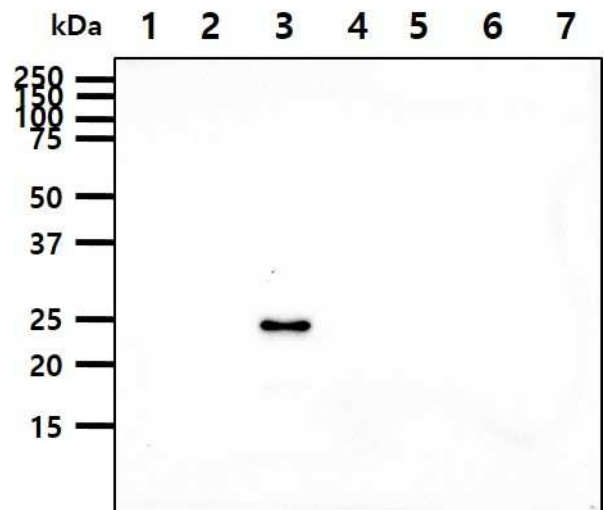
- Lane 1.: HeLa cell lysate
- Lane 2.: Jurkat cell lysate
- Lane 3.: 293T cell lysate
- Lane 4.: A549 cell lysate
- Lane 5.: Mouse Brain Tissue lysate



## Western blot analysis

The Recombinant Protein (50ng) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human 14-3-3 epsilon antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

- Lane 1.: 14-3-3 Zeta Recombinant Protein
- Lane 2.: 14-3-3 Beta Recombinant Protein
- Lane 3.: 14-3-3 Epsilon Recombinant Protein
- Lane 4.: 14-3-3 Eta Recombinant Protein
- Lane 5.: 14-3-3 Gamma Recombinant Protein
- Lane 6.: 14-3-3 Sigma Recombinant Protein
- Lane 7.: 14-3-3 Tau Recombinant Protein

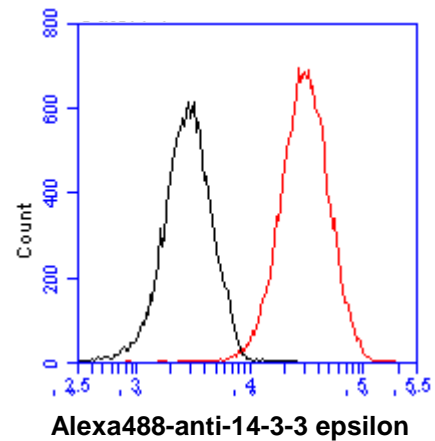


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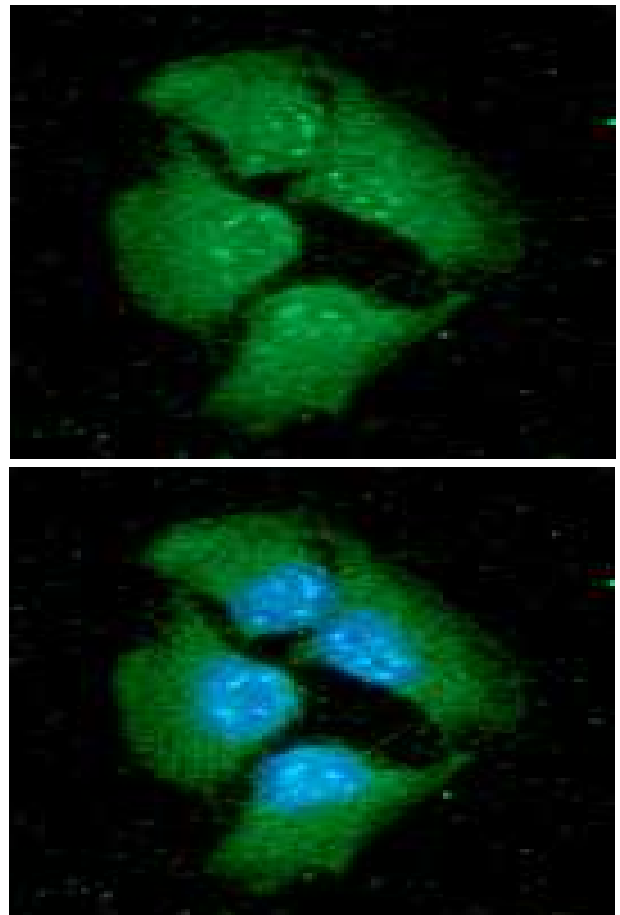
## Flow cytometry

Flow cytometry analysis of 14-3-3 epsilon in HeLa cell line, staining at 2-5ug for  $1 \times 10^6$  cells (red line). The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate. Isotype control antibody was mouse IgG (black line).



## ICC/IF analysis

ICC/IF analysis of 14-3-3 epsilon in HeLa cells line, stained with DAPI (Blue) for nucleus staining and monoclonal anti-human 14-3-3 epsilon antibody (1:100) with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).



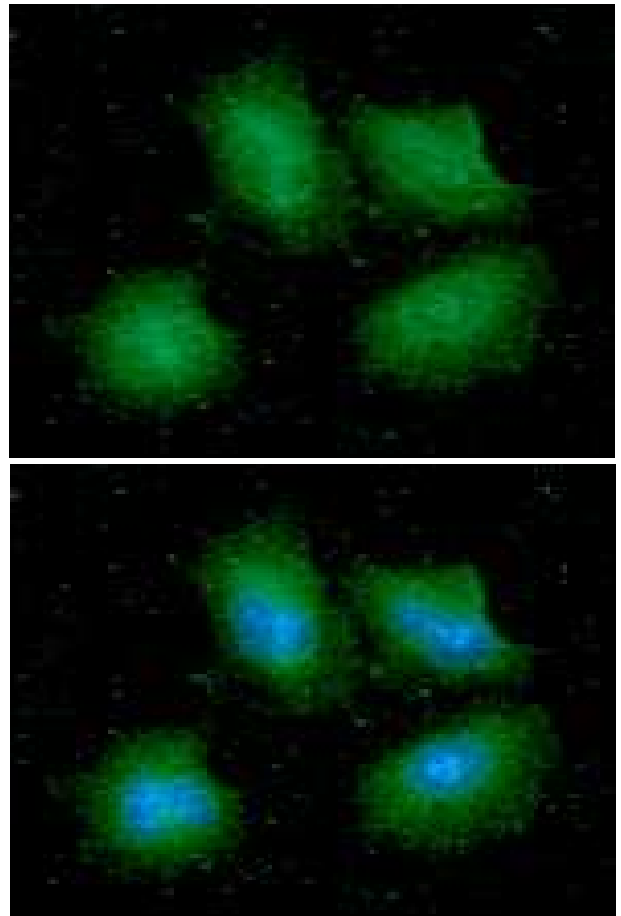
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## ICC/IF analysis

ICC/IF analysis of 14-3-3 epsilon in A549 cells line, stained with DAPI (Blue) for nucleus staining and monoclonal anti-human 14-3-3 epsilon antibody (1:100) with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).



**General references:** Oriente F., *et al.* (2005) *J Biol Chem.* **280(49)**: 40642-9.  
Conklin D., *et al.* (1995) *PNAS.* **92(17)**: 7892-6.

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