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# 14-3-3 Protein Antibody

**Affinity purified rabbit polyclonal antibody**
**Catalog # AN1075**

## Specification

### 14-3-3 Protein Antibody - Product Information

| | |
|---|---|
| Application | **WB** |
| Primary Accession | P35213 |
| Reactivity | **Rat** |
| Predicted | **Bovine, Chicken, Human, Mouse, Monkey, Xenopus, Zebrafish** |
| Host | **Rabbit** |
| Clonality | **polyclonal** |
| Calculated MW | **29 KDa** |

### 14-3-3 Protein Antibody - Additional Information

| | |
|---|---|
| Gene ID | **56011** |
| Gene Name | **YWHAB** |

**Other Names**
14-3-3 protein beta/alpha, Prepronerve growth factor RNH-1, Protein kinase C inhibitor protein 1, KCIP-1, 14-3-3 protein beta/alpha, N-terminally processed, Ywhab

**Target/Specificity**
Synthetic peptide corresponding to amino acid residues from the C-terminal region conjugated to KLH.

**Dilution**
WB~~ 1:1000

**Format**
Prepared from rabbit serum by affinity purification via chromatography on an affinity column prepared with the N-terminal peptide used as antigen.

**Antibody Specificity**
Specific for the ~29k 14-3-3 protein. Immunolabeling of the 14-3-3 protein band is completely blocked by pre-adsorption of the antibody with the peptide that was used to generate the antibody.

**Storage**
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**
14-3-3 Protein Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

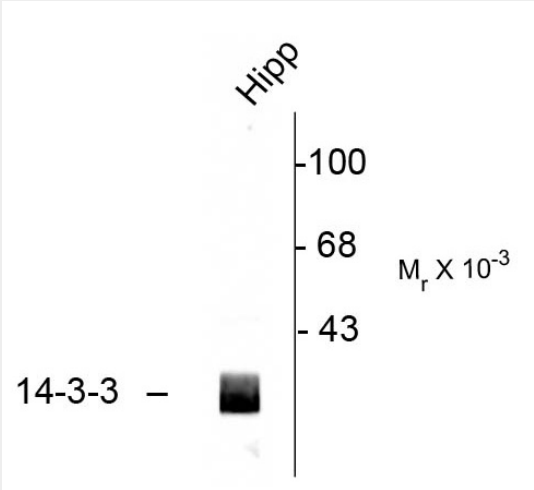
**Shipping**
Blue Ice

## 14-3-3 Protein Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## 14-3-3 Protein Antibody - Images




Western blot of rat hippocampal (Hipp) lysate showing immunolabeling of the ~29k 14-3-3 protein.

## 14-3-3 Protein Antibody - Background

14-3-3 proteins are a family of highly conserved proteins that appear to have multiple roles in cell signaling (Bridges and Moorhead, 2005). The proteins are abundantly expressed in the brain and have been detected in the cerebrospinal fluid of patients with different neurological disorders (Berg et al., 2003). 14-3-3 proteins bind protein ligands that are typically phosphorylated on serine or threonine residues and regulate the functions of these binding partners by a number of different mechanisms (Silhan et al., 2004; Dougherty and Morrison, 2004). The 14-3-3 proteins affect a diverse array of cellular processes including the cell cycle and transcription, signal transduction and intracellular trafficking.

## 14-3-3 Protein Antibody - References

Berg D, Holzmann C, Riess O (2003) 14-3-3 Proteins in the nervous system. Nat Rev Neurosci 4:752-762.
Bridges D, Moorhead GB (2005) 14-3-3 Proteins: a number of functions for a numbered protein. Sci STKE 2005:re10.
Dougherty MK, Morrison DK (2004) Unlocking the code of 14-3-3. J Cell Sci 117:1875-1884.
Silhan J, Obsilova V, Vecer J, Herman P, Sulc M, Teisinger J, Obsil T (2004) 14-3-3 Protein C-terminal stretch occupies ligand binding groove and is displaced by phosphopeptide binding. J Biol Chem

279:49113-49119.
Irina Surgucheva, Valery I. Shestopalov, and Andrei Surguchov (2008) Effect of γ-Synuclein Silencing on Apoptotic Pathways in Retinal Ganglion Cells J. Biol. Chem., 283: 36377 - 36385.