

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

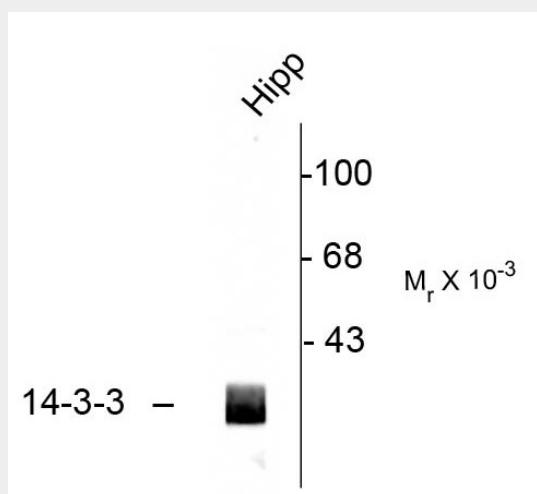
Blue Ice

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 Cytometry](#)
- [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.