Datasheet for ABIN361482

anti-YWHAB antibody (pSer58)

3 Images

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Overview

Quantity:	100 µL
Target:	YWHAB
Binding Specificity:	pSer58
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This YWHAB antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Immunogen:	Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser58 conjugated to KLH
Specificity:	Specific for the ~29k 14-3-3 protein phosphorylated at Ser58. Immunolabeling is blocked by the phosphopeptide used as antigen but not by the corresponding dephosphopeptide.
Cross-Reactivity:	Human, Rat (Rattus)
Predicted Reactivity:	bovine, canine, chicken, mouse, non-human primates, sheep, Xenopus, zebra fish
Purification:	Antigen Affinity Purified from Pooled Serum

Target Details

Target:	YWHAB

Target Details

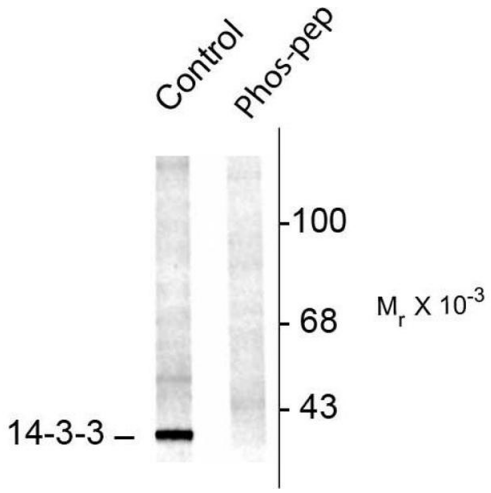
Alternative Name:	YWHAB (YWHAB Products)
Background:	14-3-3 proteins are a family of highly conserved proteins that appear to have multiple roles in cell signaling (Bridges and Moorhead, 2005). The proteins are abundantly expressed in the brain and have been detected in the cerebrospinal fluid of patients 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). The14-3-3 proteins affect a diverse array of cellular processes including the cell cycle and transcription, signal transduction and intracellular trafficking. These functions of 14-3-3 proteins are facilitated by, if not dependent on, its dimeric structure. Recent work has demonstrated that the dimeric status of the 14-3-3 protein is regulated by site-specific serine phosphorylation (Woodcock et al., 2003). Anti-Phospho-Ser58 14-3-3 Protein Western blot of rat brainstem lysate showing specific immuno- labeling of the ~29k 14-3-3 protein phosphorylated at Ser58 (Control). The immunolabeling is blocked by the phosphopeptide used as the antigen (Phos-pep) but not by the corresponding dephosphopeptide (not shown).
Molecular Weight:	'29 kDa
Gene ID:	56011
UniProt:	P35213
Pathways:	Fc-epsilon Receptor Signaling Pathway, EGFR Signaling Pathway, Neurotrophin Signaling Pathway, Myometrial Relaxation and Contraction, Maintenance of Protein Location

Application Details

Application Notes:	Recommended Dilution: WB: 1:1000 IHC: 1:500 Quality Control: Western blots performed on each lot.
Restrictions:	For Research Use only

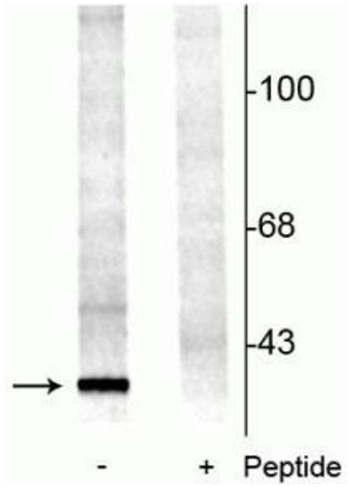
Handling

Format:	Liquid
Buffer:	100 µL in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg per ml BSA and 50 % glycerol.
Storage:	-20 °C



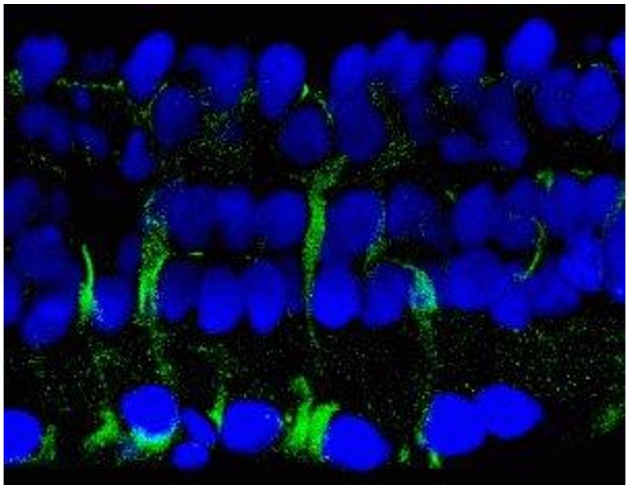
Western Blotting

Image 1. Western blots of rat brainstem lysate showing specific immuno- labeling of the ~29k 14-3-3 protein phosphorylated at Ser58 (Control). The immunolabeling is blocked by the phosphopeptide used as the antigen (Phos-pep) but not by the corresponding dephosphopeptide (not shown).



Western Blotting

Image 2. Western blot of rat brainstem lysate showing specific immunolabeling of the ~29 kDa 14-3-3 protein phosphorylated at Ser58 (-). The immunolabeling is blocked by the phosphopeptide used as the antigen (+) but not by the corresponding non-phosphopeptide (not shown).



Immunostaining

Image 3. Immunostaining of salamander retina showing labeling of 14-3-3 protein when phosphorylated at Ser58 in Müller glial cells in green and DNA in blue. Photo courtesy of Alex Vila, University of Texas at Houston.