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Anti-14-3-3 (Ser58) Antibody

Our Anti-14-3-3 (Ser58) rabbit polyclonal phosphospecific primary antibody from PhosphoSolutions is
Catalog # AN1296

Product Information

Application	WB, IHC
Primary Accession	P35213
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	28054

Additional Information

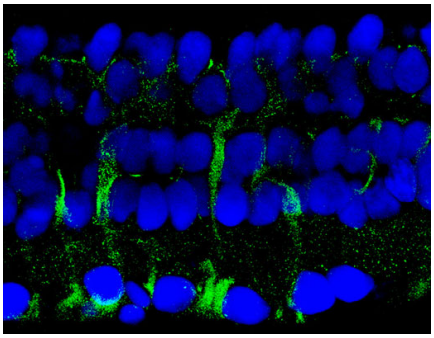
Gene ID	56011
Other Names	14 3 3 antibody, 14 3 3 protein beta antibody, 14 3 3 protein beta/alpha antibody, 14 3 3 protein zeta antibody , 14 3 3 zeta antibody, 14-3-3 protein beta/alpha antibody, 14-3-3 protein/cytosolic phospholipase A2 antibody, 1433B_HUMAN antibody, GW128 antibody, HS1 antibody, KCIP 1 antibody, KCIP-1 antibody, MGC111427 antibody, MGC126532 antibody, MGC138156 antibody, N-terminally processed antibody, Protein 1054 antibody, Protein kinase C inhibitor protein 1 antibody, Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein delta polypeptide antibody, Tyrosine 3/tryptophan 5 -monooxygenase activation protein zeta polypeptide antibody, YWHAB antibody, YWHAD antibody, YWHAZ antibody
Target/Specificity	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. 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)
Dilution	WB~~1:1000 IHC~~1:100~500
Format	Antigen Affinity Purified from Pooled Serum
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	Anti-14-3-3 (Ser58) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

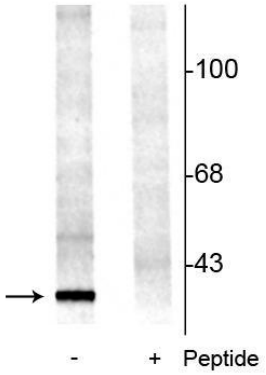
Background

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. 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)

Images



Immunostaining of salamander retina showing labeling of 14-3-3 protein when phosphorylated at Ser58(cat. AN1296, green 1:500) in Müller glial cells. The blue is staining DNA. Photo courtesy of Alex Vila, University of Texas at Houston.



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).