Anti-14-3-3 pS58 (Rabbit) Antibody - 600-401-D02

Code: 600-401-D02 **Size:** 100 µL

Product Description: Anti-14-3-3 pS58 (Rabbit) Antibody - 600-401-D02

Concentration: Titrated value sufficient to run approximately 10 mini blots.

PhysicalState: Liquid

Label	Unconjugated
Host	Rabbit
Gene Name	YWHAB
Species Reactivity	rat, human
Buffer	0.01 M HEPES, 0.15 M Sodium Chloride, pH 7.5
Stabilizer	0.1 mg/ml Bovine Serum Albumin (BSA) - IgG and Protease free, 50% (v/v) Glycerol
Storage Condition	Store vial at -20° C prior to opening. This product is stable at 4° C as an undiluted liquid. For extended storage, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Dilute only prior to immediate use.
Synonyms	14-3-3 protein beta/alpha, Prepronerve growth factor RNH-1, Protein kinase C inhibitor protein 1
Application Note	Anti-14-3-3 pS58 antibody is suitable for use in ELISA, Western Blotting and IHC. Specific conditions for reactivity should be optimized by the end user. Expect a band of approximately 29 kDa in size corresponding to the 14-3-3 proteins phosphorylated at Ser58 in the appropriate cell lysate or extract.
Background	14-3-3 pS58 antibody detects 14-3-3 protein phosphorylated at S58. 14-3-3 is a member of a family of highly conserved proteins that appear to have multiple roles in cell signaling. 14-3-3 is abundantly expressed in the brain and has been detected in the cerebrospinal fluid of patients with different neurological disorders. 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. 14-3-3 affect a diverse array of cellular processes including the cell cycle and transcription, signal transduction and intracellular trafficking. These functions 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. Anti-14-3-3 antibody is ideal for investigators involved in Cell Signaling, Neuroscience, Signal Transduction research.
Purity And Specificity	Anti-14-3-3 pS58 antibody is directed against rat 14-3-3 protein phosphorylated at S58. The antibody was prepared from monospecific antiserum by immunoaffinity chromatography using phospho peptide coupled to agarose beads followed by solid phase adsorption(s) against non-phospho peptide and non-specific peptide to remove any unwanted reactivities. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Rabbit Serum. This antibody is specific for phosphorylated 14-3-3. Minimal reactivity occurs against non-phosphorylated 14-3-3. Reactivity against 14-3-3 occurs from rat and human sources. Reactivity is expected against the following species based on 100% sequence homology: bovine, canine, chicken, mouse, non-human primates, sheep, Xenopus and zebra fish.
ELISA	1:10,000
Immunohistochemistry	1:500
WESTERN BLOT	1:1000
IHC	1:500
Expiration	Expiration date is one (1) year from date of opening.
Immunogen	Anti-14-3-3 pS58 antibody was produced by repeated immunizations with synthetic phospho-peptide corresponding to amino acid residues surrounding Ser58.
General Reference	Berg D, Holzmann C and Riess O (2003). 14-3-3 Proteins in the nervous system. Nat Rev Neurosci 4:752-762. Bridges D and Moorhead GB (2005). 14-3-3 Proteins: a number of functions for a numbered protein. Sci STKE 2005:re10. Dougherty MK and 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 and 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. Woodcock JM, Murphy J, Stomski FC, Berndt MC and Lopez AF (2003). The dimeric versus monomeric status of 14-3-3 zeta is controlled by phosphorylation of Ser58 at the dimer interface. J Biol Chem 278:36323-36327. Yang X, Luo C, Cai J, Pierce W and Tezel G (2008). Phosphorylation-Dependent Interaction with 14-3-3 in the Regulation of Bad Trafficking in Retinal Ganglion Cells. Invest. Ophthalmol. Vis. Sci., 49: 2483 - 2494.

Related Products

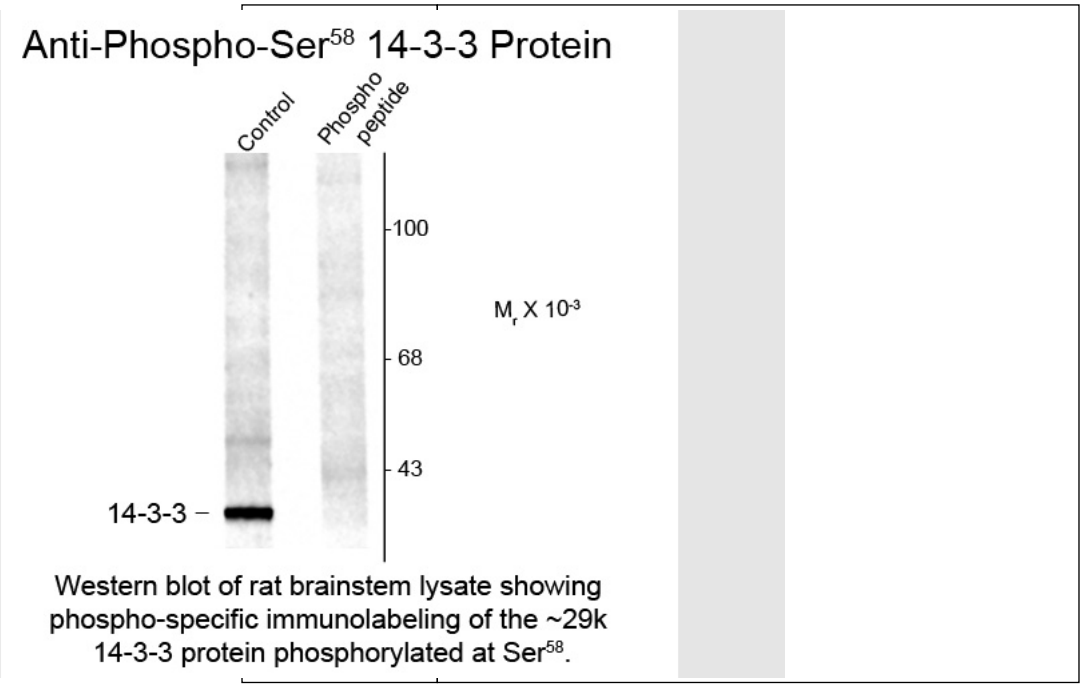
600-401-281	Anti-MAPKAP Kinase 2 (RABBIT) Antibody - 600-401-281
611-1302	Anti-RABBIT IgG (H&L) (GOAT) Antibody Peroxidase Conjugated - 611-1302
611-153-122	Anti-RABBIT IgG (H&L) (GOAT) Antibody ATTO 532 Conjugated (Min X Bv Ch Gt GP Ham Hs Hu Ms Rt & Sh Serum Proteins) - 611-153-122
FEMTOMAX-110	Chemiluminescent FemtoMax™ Super Sensitive HRP Substrate for Microwell and/or Membrane (2 component system) - FEMTOMAX-110

Related Links

P35213	http://www.uniprot.org/uniprot/P35213
56011	http://www.ncbi.nlm.nih.gov/sites/entrez?db=gene&term=56011
NP_062250.1	http://www.ncbi.nlm.nih.gov/protein/NP_062250.1

Images

1	Western Blot of Rabbit Anti-14-3-3 pS58 Antibody. Lane 1: rat brainstem lysate. Lane 2: rat brainstem lysate blocked by the phosphopeptide. Load: 10 µg per lane.Primary antibody: 14-3-3 pS58 antibody at 1:400 for overnight at 4°C.Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT.Block: 5% BLOTTO overnight at 4°C.Predicted/Observed size: ~29kDa, ~29kDa for 14-3-3 protein phosphorylated at Ser58. Other band(s): none.



Disclaimer

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