

ARG52324 anti-HDAC2 phospho (Ser394) antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes HDAC2 phospho (Ser394)
Tested Reactivity	Ms
Predict Reactivity	Hu, Rat, Bov, Chk, Gpig, NHuPrm, Sheep
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	HDAC2
Species	Human
Immunogen	Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser394 conjugated to KLH
Conjugation	Un-conjugated
Alternate Names	Histone deacetylase 2; EC 3.5.1.98; HD2; YAF1; RPD3

Application Instructions

Application table	Application	Dilution
	WB	1:1,000
Application Note	<p>Specific for the ~55k HDAC2 protein phosphorylated at Ser394 in Western blots. Immunolabeling is completely blocked by λ-Phosphatase treatment (30 minutes, 800units/1mg protein).</p> <p>* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.</p>	

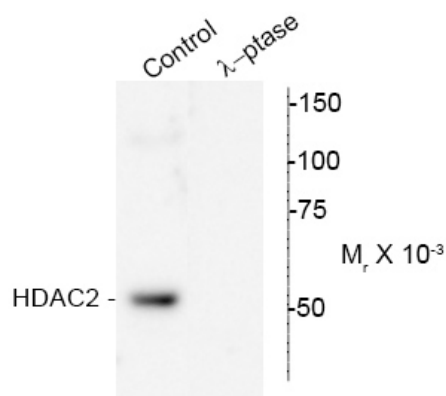
Properties

Form	Liquid
Purification	Affinity Purified
Buffer	10 mM HEPES (pH 7.5), 150 mM NaCl, 0.1 mg/ml BSA and 50% Glycerol
Stabilizer	0.1 mg/ml BSA, 50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 15182 Mouse Swiss-port # P70288 Mouse
Gene Symbol	HDAC2
Gene Full Name	histone deacetylase 2
Background	Histone Deacetylase 2 (HDAC2) is part of a family of histone deacetylases that are responsible for deacetylation of lysine residues in the histone core. HDAC2 is classified as a class I histone deacetylase and is ubiquitously expressed throughout the body (Kee et al, 2008). It has been shown that HDAC2 plays an important role in cardiac hypertrophy (Eom et al, 2011). Phosphorylation of ser394 is responsible for the hypertrophy-associated activation of HDAC2, whereas intrinsic basal activity is maintained by phosphorylation of ser422 and ser424 (EOM et al, 2011).
Research Area	Cell Biology and Cellular Response antibody; Developmental Biology antibody; Gene Regulation antibody; Signaling Transduction antibody
Calculated Mw	55 kDa
PTM	S-nitrosylated by GAPDH. In neurons, S-Nitrosylation at Cys-262 and Cys-274 does not affect the enzyme activity but abolishes chromatin-binding, leading to increases acetylation of histones and activate genes that are associated with neuronal development. In embryonic cortical neurons, S-Nitrosylation regulates dendritic growth and branching. S-Nitrosylation interferes with its interaction with MTA1 (By similarity).

Images



ARG52324 anti-HDAC2 phospho (Ser394) antibody WB image

Western blot: Mouse heart lysate showing specific immunolabeling of the ~55k HDAC2 protein phosphorylated at Ser 394 (control) stained with ARG52324 anti-HDAC2 phospho (Ser394) antibody. Phosphospecificity is shown in the second lane (lambda-phosphatase: λ-Ptase). The blot is identical to the control except that the lysate was incubated in λ-Ptase (800 units/1mg protein for 30 min). The immunolabeling is completely eliminated by treatment with λ-Ptase.