

ARG51686 anti-HDAC2 phospho (Ser394) antibody

Package: 100 µl, 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes HDAC2 phospho (Ser394)
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	HDAC2
Species	Human
Immunogen	Peptide sequence around phosphorylation site of serine 394 (E-D-S(p)-G-D) derived from Human HDAC2.
Conjugation	Un-conjugated
Alternate Names	Histone deacetylase 2; EC 3.5.1.98; HD2; YAF1; RPD3

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:100 - 1:200
	IHC-P	1:50 - 1:100
	WB	1:500 - 1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid
Purification	Antibodies were produced by immunizing rabbits with KLH-conjugated synthetic phosphopeptide. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. In addition, non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Buffer	PBS (without Mg ²⁺ and Ca ²⁺ , pH 7.4), 150mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Concentration	1 mg/ml
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.

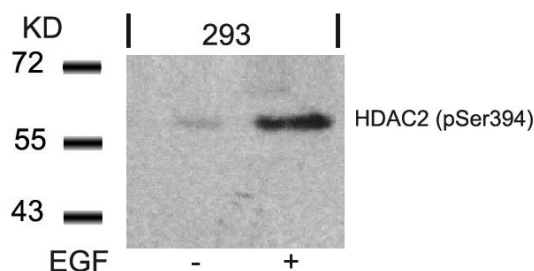
Note

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

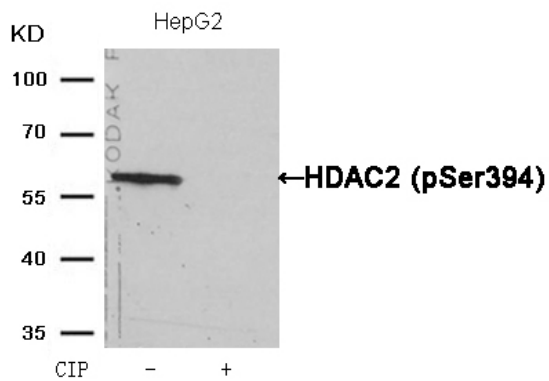
Database links	GeneID: 15182 Mouse GeneID: 3066 Human Swiss-port # P70288 Mouse Swiss-port # Q92769 Human
Gene Symbol	HDAC2
Gene Full Name	histone deacetylase 2
Background	Responsible for the deacetylation of lysine residues on the N-terminal part of the core histones (H2A, H2B, H3 and H4). Histone deacetylation gives a tag for epigenetic repression and plays an important role in transcriptional regulation, cell cycle progression and developmental events. Histone deacetylases act via the formation of large multiprotein complexes
Function	Responsible for the deacetylation of lysine residues on the N-terminal part of the core histones (H2A, H2B, H3 and H4). Histone deacetylation gives a tag for epigenetic repression and plays an important role in transcriptional regulation, cell cycle progression and developmental events. Histone deacetylases act via the formation of large multiprotein complexes. Forms transcriptional repressor complexes by associating with MAD, SIN3, YY1 and N-COR. Interacts in the late S-phase of DNA-replication with DNMT1 in the other transcriptional repressor complex composed of DNMT1, DMAP1, PCNA, CAF1. Deacetylates TSHZ3 and regulates its transcriptional repressor activity. Component of a RCOR/GFI/KDM1A/HDAC complex that suppresses, via histone deacetylase (HDAC) recruitment, a number of genes implicated in multilineage blood cell development. May be involved in the transcriptional repression of circadian target genes, such as PER1, mediated by CRY1 through histone deacetylation. Involved in MTA1-mediated transcriptional corepression of TFF1 and CDKN1A. [UniProt]
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



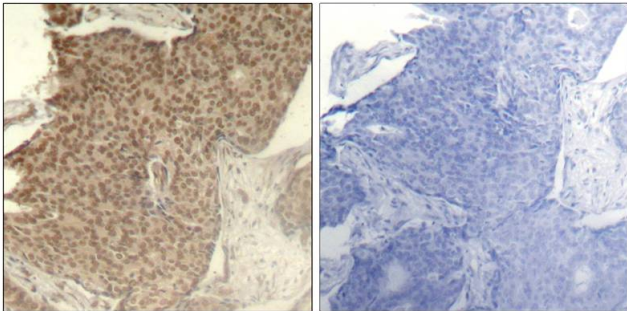
ARG51686 anti-HDAC2 phospho (Ser394) antibody WB image

Western blot: Extracts from 293 cells untreated or treated with EGF stained with ARG51686 anti-HDAC2 phospho (Ser394) antibody.



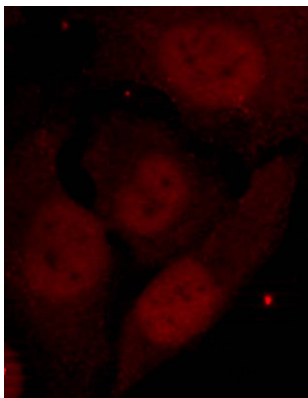
ARG51686 anti-HDAC2 phospho (Ser394) antibody WB image

Western blot: Extracts from HepG2 cells, treated with calf intestinal phosphatase (CIP), stained with ARG51686 anti-HDAC2 phospho (Ser394) antibody.



ARG51686 anti-HDAC2 phospho (Ser394) antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human breast carcinoma tissue stained with ARG51686 anti-HDAC2 phospho (Ser394) antibody (left) or the same antibody preincubated with blocking peptide (right).



ARG51686 anti-HDAC2 phospho (Ser394) antibody ICC/IF image

Immunofluorescence: methanol-fixed HeLa cells showing nuclear staining stained with ARG51686 anti-HDAC2 phospho (Ser394) antibody.