

HDAC5(Phospho-Ser498) Antibody

Catalog No: #11193

Package Size: #11193-1 50ul #11193-2 100ul #11193-4 25ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

Description

Product Name	HDAC5(Phospho-Ser498) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Applications	WB IHC
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of HDAC5 only when phosphorylated at serine498.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of serine 498 (T-Q-S(p)-S-P) derived from Human HDAC5/7.
Target Name	HDAC5
Modification	Phospho-Ser498
Other Names	HD5
Accession No.	Swiss-Prot: Q9UQL6NCBI Protein: NP_001015053.1
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.

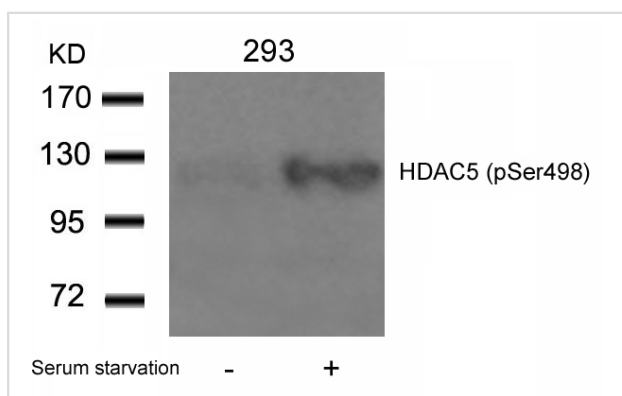
Application Details

Predicted MW: 124kd

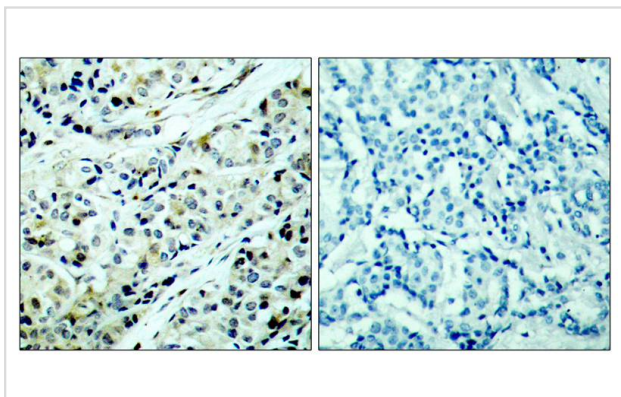
Western blotting: 1:500~1:1000

Immunohistochemistry: 1:50~1:100

Images



Western blot analysis of extracts from 293 cells untreated or treated with serum starvation using HDAC5(Phospho-Ser498) Antibody #11193.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using HDAC5(Phospho-Ser498) Antibody #11193(left) or the same antibody preincubated with blocking peptide(right).

Background

Histones play a critical role in transcriptional regulation, cell cycle progression, and developmental events. Histone acetylation/deacetylation alters chromosome structure and affects transcription factor access to DNA. The protein encoded by HDAC5 belongs to the class II histone deacetylase/acuc/alpha family. It possesses histone deacetylase activity and represses transcription when tethered to a promoter. It coimmunoprecipitates only with HDAC3 family member and might form multicomplex proteins. It also interacts with myocyte enhancer factor-2 (MEF2) proteins, resulting in repression of MEF2-dependent genes. This gene is thought to be associated with colon cancer. Two transcript variants encoding different isoforms have been found for this gene.

Doppler H, et al. (2005) J Biol Chem. 280(15):15013-15019.

McKinsey TA, et al. (2000) Nature. 408(6808): 106-111.

Published Papers

Pang J, Yan C, Natarajan K et al., GIT1 mediates HDAC5 activation by angiotensin II in vascular smooth muscle cells., Arteriosclerosis, Thrombosis, and Vascular Biology, 28(5):892-898(2008)

PMID:18292392

Sheng Xia, Xiaogang Li, Teri Johnson et al., Polycystin-dependent fluid flow sensing targets histone deacetylase 5 to prevent the development of renal cysts., Development, 137, 1075-1084(2010)

PMID:20181743

J Bossuyt, K Helmstadter, X Wu et al., Ca²⁺/calmodulin-dependent protein kinase IIdelta and protein kinase D overexpression reinforce the histone deacetylase 5 redistribution in heart failure. , Circulation Research, 102(6):695-702(2008)

PMID:18218981

Weiye Wang, Chang Hoon Ha, Bong Sook Jhun et al., Fluid shear stress stimulates phosphorylation-dependent nuclear export of HDAC5 and mediates expression of KLF2 and eNOS., Blood, 115(14):2971-2979.(2010)

PMID:20042720

Note: This product is for in vitro research use only and is not intended for use in humans or animals.