

# HDAC4/HDAC5/HDAC9(phospho-Ser246/259/220) Antibody

Catalog No: #11517

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)

Package Size: #11517-1 50ul #11517-2 100ul

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## Description

Product Name	HDAC4/HDAC5/HDAC9(phospho-Ser246/259/220) 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
Specificity	The antibody detects endogenous level of HDAC4/HDAC5/HDAC9 only when phosphorylated at serine 246/259/220.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of serine 246/259/220 (T-A-S(p)-EP) derived from Human HDAC4/HDAC5/HDAC9.
Target Name	HDAC4/HDAC5/HDAC9
Modification	Phospho
Other Names	HD4/HD5/HD9
Accession No.	Swiss-Prot: P56524 Q9UQL6 Q9UKV0NCBI Protein: NP_006028.2/NP_001015053.1 /NP_055522.1
Uniprot	P56524
GeneID	9759;
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), 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.

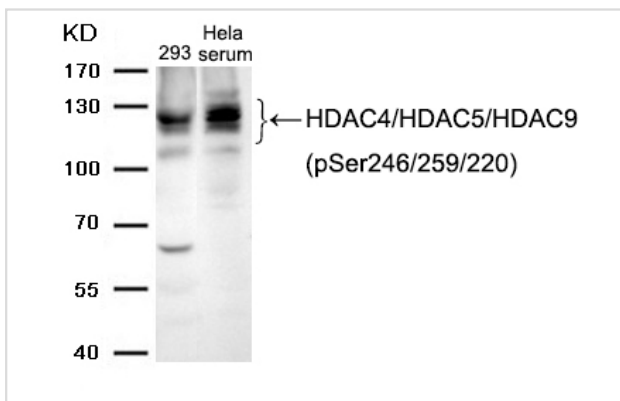
## Application Details

Predicted MW: 140 124 111 kd

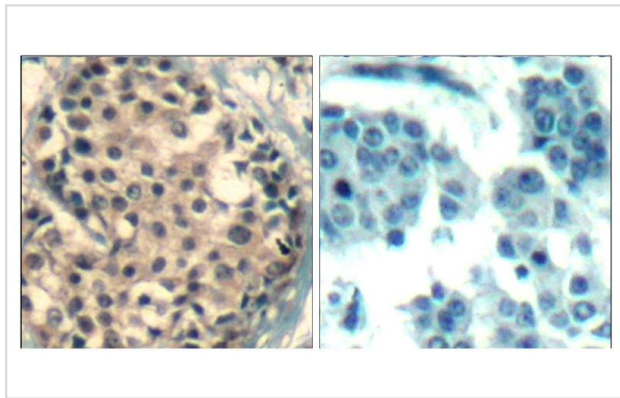
Western blotting: 1:500~1:1000

Immunohistochemistry: 1:50~1:100

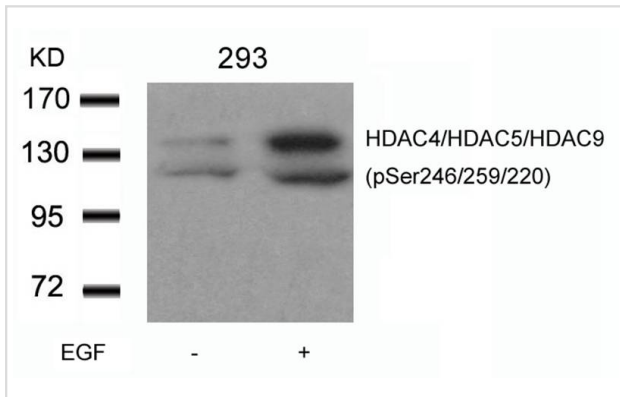
## Images



Western blot analysis of extracts from 293 cells and HeLa cells treated with serum using HDAC4/HDAC5/HDAC9 (phospho-Ser246/259/220) Antibody #11517.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using HDAC4/HDAC5/HDAC9(Phospho-Ser246/259/220) Antibody #11517(left) or the same antibody preincubated with blocking peptide(right).



Western blot analysis of extracts from 293 cells untreated or treated with EGF using HDAC4/HDAC5/HDAC9(phospho-Ser246/259/220) Antibody #11517.

## Background

Histone Deacetylases (HDACs) are a group of enzymes closely related to sirtuins. They catalyze the removal of acetyl groups from lysine residues in histones and non-histone proteins, resulting in transcriptional repression. In general, they do not act autonomously but as components of large multiprotein complexes, such as pRb-E2F and mSin3A, that mediate important transcription regulatory pathways. There are three classes of HDACs; classes 1, 2 and 4, which are closely related Zn<sup>2+</sup>-dependent enzymes. HDACs are ubiquitously expressed and they can exist in the nucleus or cytosol. Their subcellular localization is effected by protein-protein interactions (for example HDAC-14.3.3 complexes are retained in the cytosol) and by the class to which they belong (class 1 HDACs are predominantly nuclear whilst class 2 HDACs shuttle between the nucleus and cytosol). HDACs have a role in cell growth arrest, differentiation and death and this has led to substantial interest in HDAC inhibitors as possible antineoplastic agents.

Cress, W.D. and Seto, E. (2000) *J Cell Physiol* 184, 1-16.

Vigushin, D.M. and Coombes, R.C. (2004) *Curr. Cancer Drug Targets* 4, 205-218.

Marmorstein, R. (2001) *Cell Mol Life Sci* 58, 693-703.

Thiagalingam, S. et al. (2003) *Ann. N.Y. Acad. Sci.* 983, 84-100.

Note: This product is for in vitro research use only