

## 35-1312: Polyclonal Antibody to HDAC4/HDAC5/HDAC9 (phospho-Ser246/259/220)

<b>Clonality :</b>	Polyclonal
<b>Application :</b>	WB,IHC
<b>Reactivity :</b>	Human
<b>Gene :</b>	HDAC4
<b>Gene ID :</b>	9759
<b>Uniprot ID :</b>	P56524 /Q9UQL6 Q
<b>Format :</b>	Purified
<b>Alternative Name :</b>	HD4/HD5/HD9
<b>Isotype :</b>	Rabbit IgG
<b>Immunogen Information :</b>	Peptide sequence around phosphorylation site of serine 246/259/220 (T-A-S(p)-EP) derived from Human HDAC4/HDAC5/HDAC9.

### Description

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.

### Product Info

<b>Amount :</b>	50 µl / 100 µl
<b>Content :</b>	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.
<b>Storage condition :</b>	Store the antibody at 4°C, stable for 6 months. For long-term storage, store at -20°C. Avoid repeated freeze and thaw cycles.

### Application Note

Predicted MW: 140 124 111 kd, Western blotting: 1:500~1:1000, Immunohistochemistry: 1:50~1:100

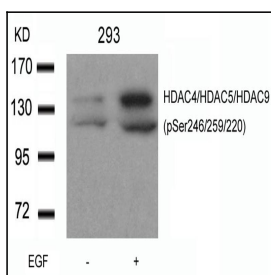


Figure 1: Western blot analysis of extracts from 293 cells untreated or treated with EGF using HDAC4/HDAC5/HDAC9(phospho-Ser246/259/220) Antibody 35-1312 .

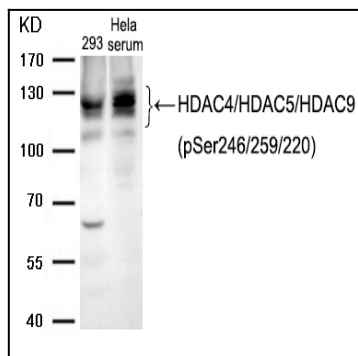


Figure 2: Western blot analysis of extracts from 293 cells and HeLa cells treated with serum using HDAC4/HDAC5/HDAC9 (phospho-Ser246/259/220) Antibody 35-1312 .

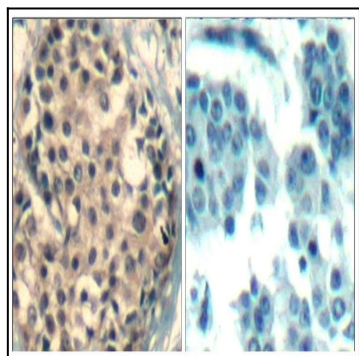


Figure 3: Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using HDAC4/HDAC5/HDAC9(Phospho-Ser246/259/220) Antibody 35-1312 (left) or the same antibody preincubated with blocking peptide(right).