

**HDAC4 (phospho Ser632) rabbit pAb****Cat#: orb764198 (Manual)**

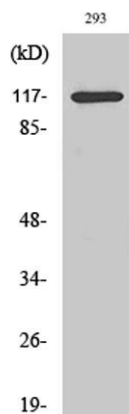
For research use only. Not intended for diagnostic use.

<b>Product Name</b>	HDAC4 (phospho Ser632) rabbit pAb
<b>Host species</b>	Rabbit
<b>Applications</b>	WB;ELISA
<b>Species Cross-Reactivity</b>	Human;Mouse;Rat
<b>Recommended dilutions</b>	Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications.
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human HDAC4 around the phosphorylation site of Ser632. AA range:598-647
<b>Specificity</b>	Phospho-HDAC4 (S632) Polyclonal Antibody detects endogenous levels of HDAC4 protein only when phosphorylated at S632.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide..
<b>Storage</b>	Store at -20°C. Avoid repeated freeze-thaw cycles.
<b>Protein Name</b>	Histone deacetylase 4
<b>Gene Name</b>	HDAC4
<b>Cellular localization</b>	Nucleus. Cytoplasm. Shuttles between the nucleus and the cytoplasm. Upon muscle cells differentiation, it accumulates in the nuclei of myotubes, suggesting a positive role of nuclear HDAC4 in muscle differentiation. The export to cytoplasm depends on the interaction with a 14-3-3 chaperone protein and is due to its phosphorylation at Ser-246, Ser-467 and Ser-632 by CaMK4 and SIK1. The nuclear localization probably depends on sumoylation. Interaction with SIK3 leads to HDAC4 retention in the cytoplasm (By similarity). .

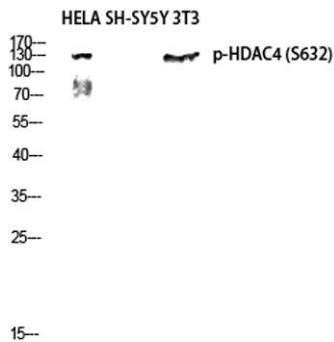
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Clonality</b>	Polyclonal
<b>Concentration</b>	1 mg/ml
<b>Observed band</b>	119kD
<b>Human Gene ID</b>	9759
<b>Human Swiss-Prot Number</b>	P56524
<b>Alternative Names</b>	HDAC4; KIAA0288; Histone deacetylase 4; HD4

**Background**

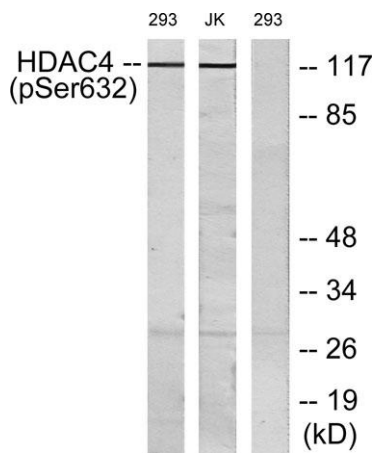
Histones play a critical role in transcriptional regulation, cell cycle progression, and developmental events. Histone acetylation/deacetylation alters chromosome structure and affects transcription factor access to DNA. The protein encoded by this gene belongs to class II of the histone deacetylase/acuc/apha family. It possesses histone deacetylase activity and represses transcription when tethered to a promoter. This protein does not bind DNA directly, but through transcription factors MEF2C and MEF2D. It seems to interact in a multiprotein complex with RbAp48 and HDAC3. [provided by RefSeq, Jul 2008],



**Western Blot analysis of various cells using Phospho-HDAC4 (S632) Polyclonal Antibody diluted at 1:1000**



Western blot analysis of HELA SH-SY5Y 3T3 lysis using Phospho-HDAC4 (S632) antibody. Antibody was diluted at 1:1000



Western blot analysis of lysates from 293 cells treated with etoposide 25uM 1 hour and Jurkat cells treated with etoposide 25uM 24 hours, using HDAC4 (Phospho-Ser632) Antibody. The lane on the right is blocked with the phospho peptide.