

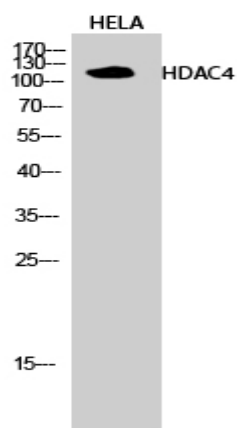
## HDAC4 Polyclonal Antibody

|                              |  |
|------------------------------|--|
| <b>Catalog No :</b>          | YT2115   |
| <b>Reactivity :</b>          | Human;Mouse;Rat  |
| <b>Applications :</b>        | WB;ELISA   |
| <b>Target :</b>              | HDAC4  |
| <b>Fields :</b>              | >>Apelin signaling pathway;>>Neutrophil extracellular trap formation;>>Alcoholism;>>Viral carcinogenesis;>>MicroRNAs in cancer |
| <b>Gene Name :</b>           | HDAC4  |
| <b>Protein Name :</b>        | Histone deacetylase 4  |
| <b>Human Gene Id :</b>       | 9759   |
| <b>Human Swiss Prot No :</b> | P56524   |
| <b>Mouse Gene Id :</b>       | 208727   |
| <b>Mouse Swiss Prot No :</b> | Q6NZM9   |
| <b>Rat Gene Id :</b>         | 363287   |
| <b>Rat Swiss Prot No :</b>   | Q99P99   |
| <b>Immunogen :</b>           | The antiserum was produced against synthesized peptide derived from human HDAC4. AA range:598-647                              |
| <b>Specificity :</b>         | HDAC4 Polyclonal Antibody detects endogenous levels of HDAC4 protein.  |
| <b>Formulation :</b>         | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.  |
| <b>Source :</b>              | Polyclonal, Rabbit,IgG   |
| <b>Dilution :</b>            | WB 1:500 - 1:2000. ELISA: 1:20000. Not yet tested in other applications.   |

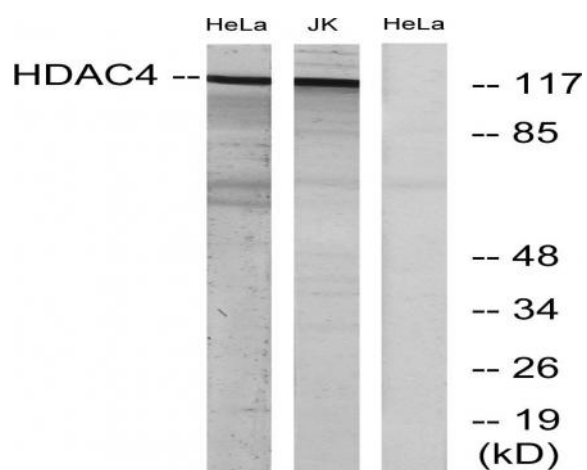
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|-------------------------------|---|
| <b>Purification :</b>         | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.   |
| <b>Concentration :</b>        | 1 mg/ml   |
| <b>Storage Stability :</b>    | -15°C to -25°C/1 year(Do not lower than -25°C)  |
| <b>Observed Band :</b>        | 119kD   |
| <b>Cell Pathway :</b>         | Protein_Acetylation   |
| <b>Background :</b>           | <p>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],</p>  |
| <b>Function :</b>             | <p>catalytic activity:Hydrolysis of an N(6)-acetyl-lysine residue of a histone to yield a deacetylated histone.,domain:The nuclear export sequence mediates the shuttling between the nucleus and the cytoplasm.,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. Involved in muscle maturation via its interaction with the myocyte enhancer factors such as MEF2A, MEF2C and MEF2D.,PTM:Phosphorylated by CaMK4 at Ser-246, Ser-467 and Ser-632. Phosphorylation at other residues is required for the interaction with 14-3-3.,PTM:Sumoylation on Lys-559 is promoted by the E3 SUMO-protein lig</p> |
| <b>Subcellular Location :</b> | <p>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). .</p>   |
| <b>Expression :</b>           | Ubiquitous.   |

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## Products Images



Western Blot analysis of HELA cells using HDAC4 Polyclonal Antibody diluted at 1:2000



Western blot analysis of lysates from HeLa and Jurkat cells, using HDAC4 Antibody. The lane on the right is blocked with the synthesized peptide.