

HDAC4 Polyclonal Antibody

Catalog Number: E90239 Amount: 100ul

> Background: Acetylation of the histone tail causes chromatin to adopt an "open" conformation, allowing

> > increased accessibility of transcription factors to DNA. The identification of histone acetyltransferases (HATs) and their large multiprotein complexes has yielded important insights into how these enzymes regulate transcription (1,2). HAT complexes interact with sequence-specific activator proteins to target specific genes. In addition to histones, HATs can acetylate nonhistone proteins, suggesting multiple roles for these enzymes (3). In contrast, histone deacetylation promotes a "closed" chromatin conformation and typically leads to repression of gene activity (4). Mammalian histone deacetylases can be divided into three classes on the basis of their similarity to various yeast deacetylases (5). Class I proteins (HDACs 1, 2, 3, and 8) are related to the yeast Rpd3-like proteins, those in class II (HDACs 4, 5, 6, 7, 9, and 10) are related to yeast Hda1-like proteins, and class III proteins are related to the yeast protein Sir2. Inhibitors of HDAC activity are now being explored as

potential therapeutic cancer agents (6,7).

Rabbit Species: Isotype: IgG

Storage/Stability: Store at -20oC or -80oC. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide,

50% glycerol, pH7.3.

Synonyms: HDAC4;HA6116;HD4;HDAC-A;HDACA;KIAA0288;

Immunogen: A synthetic peptideof human HDAC4

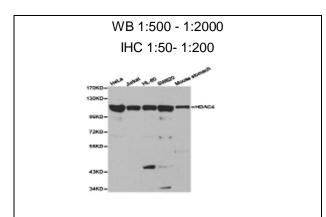
Purification: Affinity purification

Reactivity: H M R Applications: WB IHC Molecular Weight: 119kDa Swiss-Prot No.: P56524 Gene ID:

> References: 1. Marmorstein, R. (2001) Cell Mol Life Sci 58, 693-703. 2. Gregory, P.D. et al. (2001) Exp

> > Cell Res 265, 195-202. 3. Liu, Y. et al. (2000) Mol Cell Biol 20, 5540-53. 4. Cress, W.D. and Seto, E. (2000) J Cell Physiol 184, 1-16. 5. Gray, S.G. and Ekström, T.J. (2001) Exp Cell Res 262, 75-83. 6. Thiagalingam, S. et al. (2003) Ann. N.Y. Acad. Sci. 983, 84-100. 7.

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



Western blot analysis of extracts of various cell lines, using HDAC4 antibody.Immunohistochemistry of paraffin-embedded H-lung using HDAC4 Antibody.