HDAC2 Polyclonal Antibody

E92084

Catalog Number: E92084
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). HDAC1 and HDAC2 are highly homologous and are involved in histone deacetylation, chromatin remodeling and transcriptional repression (8-10). Both proteins are found together in numerous complexes including the nucleosome remodeling and deacetylation complex (NuRD), MeCP1, and the mSin3A corepressor complex.
Species: Rabbit
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: RPD3; YAF1;
Immunogen: A synthetic peptideof human HDAC2
Purification: Affinity purification
Reactivity: H M R
Applications: WB IHC
Molecular Weight: 55kDa
Swiss-Prot No. : Q92769
Gene ID: 3066
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. 8. Zhang, Y. et al. (1999) Genes Dev 13, 1924-35. 9. Ng, H.H. et al. (1999) Nat Genet 23, 58-61. 10. Zhang, Y. et al. (1997) Cell 89, 357-64.

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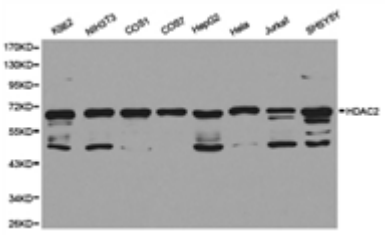
WB 1:500 - 1:2000

IHC 1:50- 1:200



Western blot analysis of extracts of variouscell lines, using HDAC2 antibody.

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