

## **Product datasheet for TA327261**

## **HDAC2 Rabbit Polyclonal Antibody**

## **Product data:**

**Product Type:** Primary Antibodies

**Applications:** IHC, IP, WB

**Recommended Dilution:** WB: 1:500-1:2000

Reactivity: Human, Mouse, Rat

**Host:** Rabbit

**Isotype:** IgG

**Clonality:** Polyclonal

**Immunogen:** A synthetic peptide of human HDAC2

Formulation: Store at -20C or -80C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50%

glycerol, pH7.3

**Concentration:** lot specific

**Purification:** Affinity purification

**Conjugation:** Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

**Gene Name:** histone deacetylase 2

Database Link: NP 001518

Entrez Gene 15182 MouseEntrez Gene 84577 RatEntrez Gene 3066 Human

Q92769



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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. 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. In contrast, histone deacetylation promotes a "closed" chromatin conformation and typically leads to repression of gene activity. Mammalian histone deacetylases can be divided into three classes on the basis of their similarity to various yeast deacetylases. 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. HDAC1 and HDAC2 are highly homologous and are involved in histone deacetylation, chromatin remodeling and transcriptional repression. Both proteins are found together in numerous complexes including the nucleosome remodeling and deacetylation complex (NuRD), MeCP1, and the mSin3A corepressor complex.

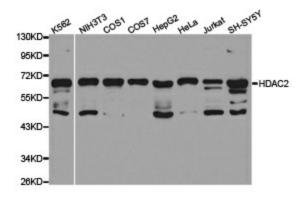
Synonyms: HD2; RPD3; YAF1

**Protein Families:** Druggable Genome, Stem cell - Pluripotency, Transcription Factors

**Protein Pathways:** Cell cycle, Chronic myeloid leukemia, Huntington's disease, Notch signaling pathway,

Pathways in cancer

## **Product images:**



Western blot analysis of extracts of various cell lines, using HDAC2 antibody.