



# Anti-HDAC1 monoclonal antibody, clone 6G0 (DCABH-409)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

|                            |   |
|----------------------------|---|
| <b>Product Overview</b>    | Mouse monoclonal to HDAC1   |
| <b>Antigen Description</b> | 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. Deacetylates SP proteins, SP1 and SP3, and regulates their function. Component of the BRG1-RB1-HDAC1 complex, which negatively regulates the CREB-mediated transcription in resting neurons. Upon calcium stimulation, HDAC1 is released from the complex and CREBBP is recruited, which facilitates transcriptional activation. Deacetylates TSHZ3 and regulates its transcriptional repressor activity. Deacetylates Lys-310 in RELA and thereby inhibits the transcriptional activity of NF-kappa-B. |
| <b>Immunogen</b>           | Recombinant full length Human HDAC1 (NP_004955) produced in HEK293T cells   |
| <b>Isotype</b>             | IgG2b   |
| <b>Source/Host</b>         | Mouse   |
| <b>Species Reactivity</b>  | Rat, Dog, Human, Monkey   |
| <b>Clone</b>               | 6G0   |
| <b>Purification</b>        | This antibody was purified from mouse ascites fluids by affinity chromatography.  |
| <b>Conjugate</b>           | Unconjugated  |
| <b>Applications</b>        | WB, Flow Cyt, ICC/IF  |
| <b>Positive Control</b>    | HEK293T cell lysate transfected with pCMV6-ENTRY HDAC1; COS7 cells transiently  |

transfected by pCMV6-ENTRY HDAC1; HEK293T cells transfected with HDAC1 overexpressing plasmid; HepG2, HeLa, HT29, COS7, Jurkat, MDCK, PC12, MCF7 cell extract

|                     |   |
|---------------------|---|
| <b>Format</b>       | Liquid  |
| <b>Size</b>         | 100 µl  |
| <b>Buffer</b>       | pH: 7.30; Preservative: 0.02% Sodium azide; Constituents: 1% BSA, 50% Glycerol, 48% PBS |
| <b>Preservative</b> | 0.02% Sodium Azide  |
| <b>Storage</b>      | store at -20°C. Avoid freeze / thaw cycles.   |
| <b>Ship</b>         | Shipped at 4°C.   |

## GENE INFORMATION

|                            |  |
|----------------------------|--|
| <b>Gene Name</b>           | <a href="#">HDAC1 histone deacetylase 1 [ Homo sapiens ]</a>   |
| <b>Official Symbol</b>     | HDAC1  |
| <b>Synonyms</b>            | HDAC1; histone deacetylase 1; RPD3L1; GON 10; HD1; reduced potassium dependency, yeast homolog-like 1; RPD3; GON-10; DKFZp686H12203;   |
| <b>Entrez Gene ID</b>      | <a href="#">3065</a>   |
| <b>Protein Refseq</b>      | <a href="#">NP_004955</a>  |
| <b>UniProt ID</b>          | <a href="#">Q13547</a>   |
| <b>Chromosome Location</b> | 1p34   |
| <b>Pathway</b>             | Amphetamine addiction, organism-specific biosystem; Amphetamine addiction, conserved biosystem; Androgen Receptor Signaling Pathway, organism-specific biosystem; Cell Cycle, organism-specific biosystem; Cell Cycle, Mitotic, organism-specific biosystem; Cell cycle, organism-specific biosystem; Cell cycle, organism-specific biosystem; |
| <b>Function</b>            | NAD-dependent histone deacetylase activity (H3-K14 specific); NAD-dependent histone deacetylase activity (H3-K9 specific); NAD-dependent histone deacetylase activity (H4-K16 specific); RNA polymerase II transcription corepressor activity; activating trans  |