

Basic Information

Product Name	Anti-HDAC2 Antibody	
Gene Name	HDAC2	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF, FCM, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human HDAC2 recombinant protein (Position: E387-P488).	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	60 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	Flow Cytometry (Fixed):	1:50-200
	Enzyme linked immunosorbent assay (ELISA):	1:100-1000
	(Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied.

Background Information

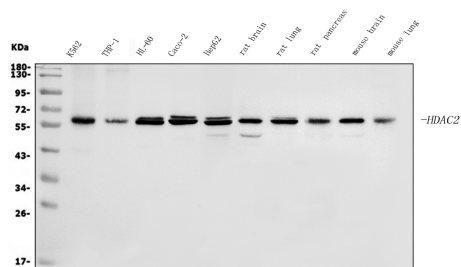
Histone deacetylase 2 is an enzyme that in humans is encoded by the HDAC2 gene. This gene product belongs to the histone deacetylase family. Histone deacetylases act via the formation of large multiprotein complexes and are responsible for the deacetylation of lysine residues on the N-terminal region of the core histones(H2A, H2B, H3 and H4). This protein also forms transcriptional repressor complexes by associating with many different proteins, including YY1, a mammalian zinc-finger transcription factor. Thus it plays an important role in transcriptional regulation, cell cycle progression and developmental events. Betz et al.(1998) performed PCR using HDAC2-specific primers to screen a

somatic cell hybrid mapping panel. They mapped the HDAC2 gene to human chromosome 6q21, a region of the genome altered in some cancers, including retinoblastoma.

Reference

Anti-HDAC2 Antibody被引用在3文献中。

Selected Validation Data



Western blot analysis of HDAC2 using anti-HDAC2 antibody (A00325-3). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: K562 whole cell lysates,

Lane 2: THP-1 whole cell lysates,

Lane 3: HL-60 whole cell lysates,

Lane 4: Caco-2 whole cell lysates,

Lane 5: HepG2 whole cell lysates,

Lane 6: rat brain tissue lysates,

Lane 7: rat lung tissue lysates,

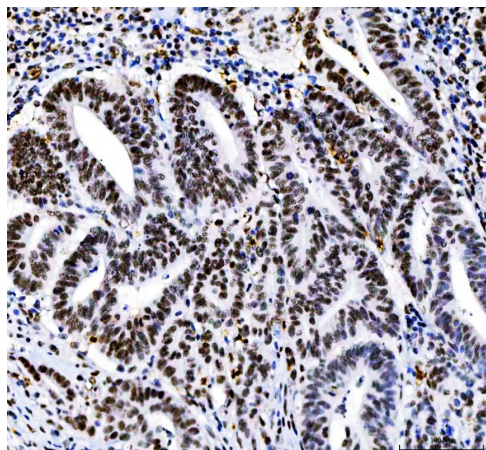
Lane 8: mouse brain tissue lysates,

Lane 9: mouse lung tissue lysates.

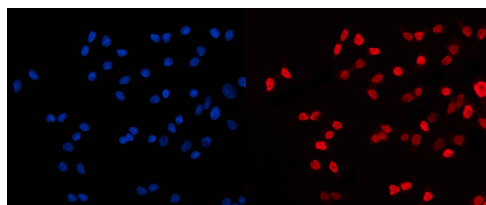
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-HDAC2 antigen affinity purified polyclonal antibody (A00325-3) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for HDAC2 at approximately 60 kDa. The expected band size for HDAC2 is at 55 kDa.

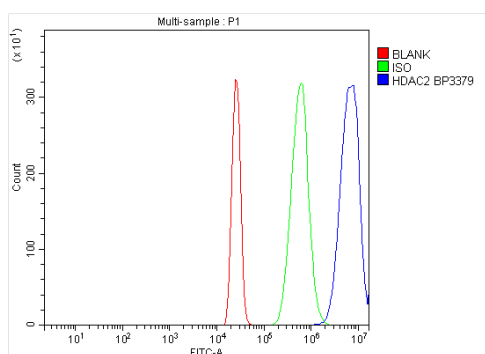
A specific band was detected for HDAC2 at approximately 60 kDa. The expected band size for HDAC2 is at 55 kDa.



IHC analysis of HDAC2 using anti-HDAC2 antibody (A00325-3). HDAC2 was detected in a paraffin-embedded section of human colon cancer tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-HDAC2 Antibody (A00325-3) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



ICC/IF analysis of HDAC2 using anti-HDAC2 antibody (A00325-3). HDAC2 was detected in an immunocytochemical section of Caco-2 cells. The section was incubated with rabbit anti-HDAC2 Antibody (A00325-3) at a dilution of 1:100. Fluoro594-conjugated Anti-rabbit IgG Secondary Antibody (red)(Catalog#BA1142) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of HL-60 cells using anti-HDAC2 antibody (A00325-3).

Overlay histogram showing HL-60 cells stained with A00325-3 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-HDAC2 Antibody (A00325-3) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.