

HDAC2 (PT0063R) PT™ Rabbit mAb

CatalogNo: YM8033

Recombinant KD/KO Validated 

Key Features

Host Species

- Rabbit

Reactivity

- Human, Mouse, Rat

Applications

- WB, IHC, IF, IP, ELISA

MW

- 55kD (Calculated)
- 55kD (Observed)

Isotype

- IgG, Kappa

Storage

Storage* -15°C to -25°C/1 year (Do not lower than -25°C)

Formulation PBS, 50% glycerol, 0.05% Proclin 300, 0.05% BSA

Recommended Dilution Ratios

IHC 1:200-500

WB 1:1000-5000

IF 1:200-1000

ELISA 1:5000-20000

IP 1:50-200

Basic Information

Clonality Monoclonal

Clone Number PT0063R

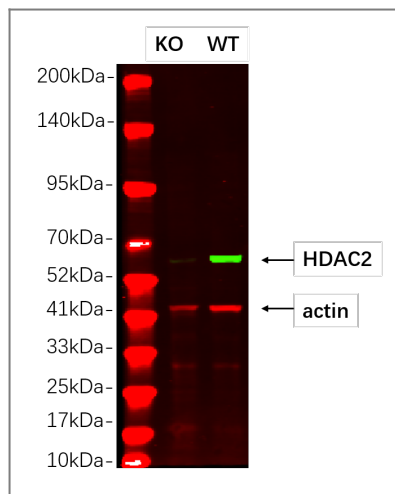
Immunogen Information

Specificity Endogenous

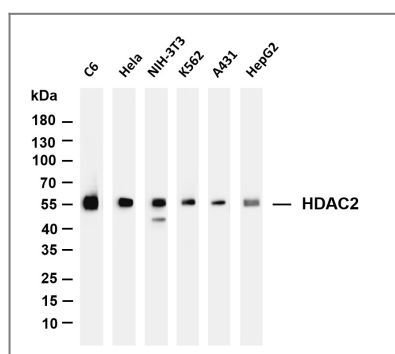
| Target Information

Gene name	HDAC2		
Protein Name	Histone deacetylase 2		
	Organism	Gene ID	UniProt ID
	Human	3066 ;	Q92769 ;
	Mouse	15182 ;	P70288 ;
Cellular Localization	Nuclear		
Tissue specificity	Widely expressed; lower levels in brain and lung.		
Function	Catalytic activity:Hydrolysis of an N(6)-acetyl-lysine residue of a histone to yield a deacetylated histone.,Function:Forms transcriptional repressor complexes by associating with MAD, SIN3, YY1 and N-COR. Interacts in the late S-phase of DNA-replication with DNMT1 in the other transcriptional repressor complex composed of DNMT1, DMAP1, PCNA, CAF1.,Function: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.,sequence Caution:Intron retention.,similarity:Belongs to the histone deacetylase family. Type 1 subfamily.,subunit:Interacts with the non-histone region of H2AFY (By similarity). Part of the core histone deacetylase (HDAC) complex composed of HDAC1, HDAC2, RBBP4 and RBBP7. The core complex associates with MTA2, MBD3, MTA1L1, CHD3 and CHD4 to form the nucleosome remodeling and histone deacetylation (NuRD) complex, or with SIN3, SAP18 and SAP30 to form the SIN3 HDAC complex. Component of a BHC histone deacetylase complex that contains HDAC1, HDAC2, HMG20B/BRAF35, AOF2/LSD1, RCOR1/CoREST and PHF21A/BHC80. The BHC complex may also contain ZMYM2, ZNF217, ZMYM3, GSE1 and GTF2I. Part of a complex containing the core histones H2A, H2B, H3 and H4, DEK and unphosphorylated DAXX. Part of a complex containing ATR and CHD4. Forms a heterologous complex at least with YY1. Interacts with ATR, DNMT1, MINT, HDAC7, HDAC10, HCFC1, NRIP1, MJD2A/JHDM3A, PRDM6, SAP30, SETDB1 and SUV39H1. Interacts with the non-histone region of H2AFY. Interacts with PELP1. Component of a mSin3A corepressor complex that contains SIN3A, SAP130, SUDS3/SAP45, ARID4B/SAP180, HDAC1 and HDAC2. Interacts with CBFA2T3. Interacts with SAP30L.,tissue specificity:Widely expressed; lower levels in brain and lung.,		

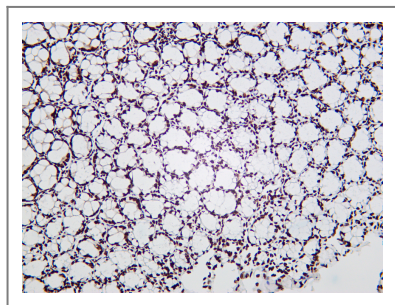
| Validation Data



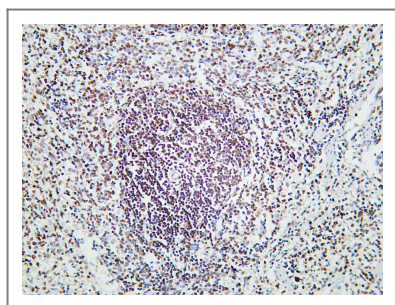
Western blot analysis of lysates from HAP1 WT and knockout cell , (Green) primary antibody was diluted at 1:5000, 4° over night, Dylight 800 secondary antibody(Immunoway:RS23920)was diluted at 1:10000, 37° 1hour. (Red) GAPDH Monoclonal Antibody(5B7) (Immunoway:YM3028) antibody was diluted at 1:5000 as loading control, 4° over night, Dylight 680 secondary antibody(Immunoway:RS23710)was diluted at 1:10000, 37° 1hour.



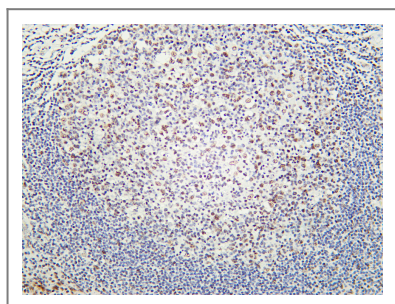
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-HDAC2 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: C6 Lane 2: Hela Lane 3: NIH-3T3 Lane 4: K562 Lane 5: A431 Lane 6: HepG2 Predicted band size: 55kDa Observed band size: 55kDa



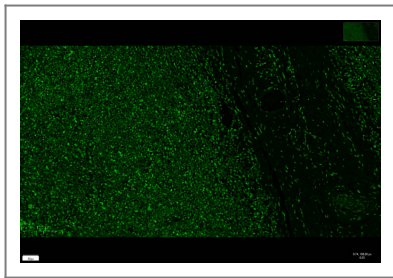
Mouse colon was stained with Anti-HDAC2 rabbit antibody



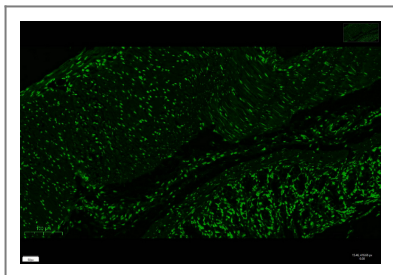
Rat spleen was stained with Anti-HDAC2 rabbit antibody



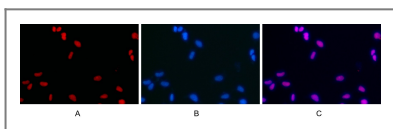
Human tonsil was stained with Anti-HDAC2 rabbit antibody



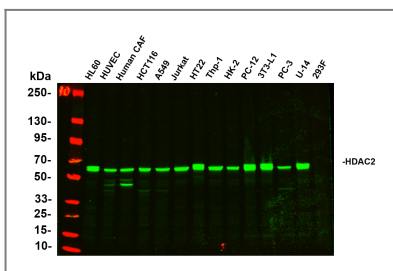
human tonsil was stained with Anti-HDAC2 rabbit antibody



rat colon was stained with Anti-HDAC2 rabbit antibody



Immunofluorescence analysis of HEK293. Picture A: HDAC2 antibody (red). Picture B: DAPI (blue). Picture C: Merge of A+B



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the primary antibody was used at 4°C, over night with a 1:2500 dilution . The Dylight 800-conjugated Goat anti-Rabbit antibody(Cat:RS23920) was used to detect the antibody. Lane1: HL60 - Human promyelocytic leukemia cell Lane2: HUVEC - Human umbilical vein endothelial cell Lane3: Human CAF - Human cancer-associated fibroblast Lane4: HCT116 - Human colorectal carcinoma Lane5: A549 - Human lung carcinoma Lane6: Jurkat - Human T lymphocyte leukemia Lane7: HT22 - Mouse hippocampal neuronal Lane8: Thp-1 - Human monocytic leukemia Lane9: HK-2 - Human proximal tubular epithelial Lane10: PC-12 - Rat adrenal pheochromocytoma Lane11: 3T3-L1 - Mouse embryonic fibroblast cells Lane12: PC-3 - Human prostate adenocarcinoma Lane13: U-14 - Mouse cervical carcinoma Lane14: 293F - HEK293 derivative, adapted for suspension culture Predicted band size: 55kDa Observed band size: 55kDa

Contact information

Orders: order@immunoway.com
 Support: tech@immunoway.com
 Telephone: 877-594-3616 (Toll Free), 408-747-0185
 Website: <http://www.immunoway.com>
 Address: 2200 Ringwood Ave San Jose, CA 95131 USA



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PT™ Rabbit mAb