

# HDAC1 Polyclonal Antibody

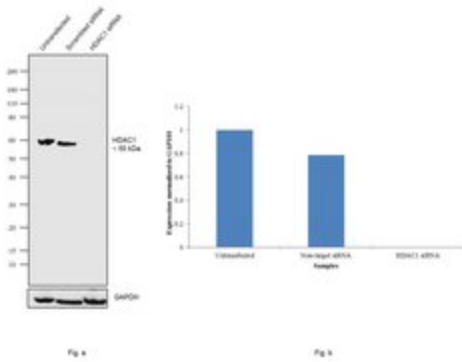
Product Details	
Size	100 µg
Species	Dog, Hamster, Human, Mouse, Rat
Published Species	Rat, Fruit fly, Human, Mouse, Chimpanzee
Expression System	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Unconjugated
Immunogen	Synthetic peptide corresponding to residues C E(467) E K P E A K G V K E E V K L A(482) of human HDAC1.
Form	Liquid
Concentration	1 mg/mL
Purification	Antigen affinity chromatography
Storage buffer	PBS with 1mg/mL BSA
Contains	0.05% sodium azide
Storage Conditions	-20° C, Avoid Freeze/Thaw Cycles
RRID	AB_2118091

Applications	Tested Dilution	Publications
ChIP assay (ChIP)	2.5 µg/10 <sup>6</sup> cells	10 Publications
Immunocytochemistry (ICC)	2.0 µg/mL	3 Publications
Immunofluorescence (IF)	10 µg/mL	7 Publications
Immunohistochemistry (Frozen) (IHC (F))	0.2 µg/mL	-
Immunohistochemistry (Paraffin) (IHC (P))	1:200	1 Publication
Immunoprecipitation (IP)	Assay dependent	6 Publications
Western Blot (WB)	1 µg/mL	32 Publications
Immunohistochemistry (IHC)	-	5 Publications
Miscellaneous PubMed (Misc)	-	1 Publication

## Product Specific Information

PA1-860 detects histone deacetylase 1 (HDAC1) from human, mouse, rat, hamster and canine tissues and cells. PA1-860 has been successfully used in Western blot, immunoprecipitation, ChIP, immunofluorescence, immunocytochemistry and immunohistochemistry procedures. By Western blot, this antibody detects an ~62 kDa protein representing HDAC1 from HeLa cell lysate. Immunocytochemical staining of HDAC1 in HeLa cells with PA1-860 results in nuclear staining. The PA1-860 immunogen is a synthetic peptide corresponding to residues C E(467) E K P E A K G V K E E V K L A(482) of human HDAC1. This immunizing peptide (Cat. # PEP-069) is available for use in neutralization and control experiments.

## Advanced Verification Data



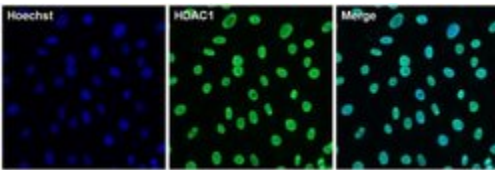
### HDAC1 Antibody (PA1-860)

Antibody specificity was demonstrated by siRNA mediated knockdown of target protein. MCF7 cells were transfected with HDAC1 siRNA and decrease in signal intensity was observed in western blot application using Anti- HDAC1 Polyclonal Antibody (Product # PA1-860). Knockdown validation info.

## Product Images For HDAC1 Polyclonal Antibody

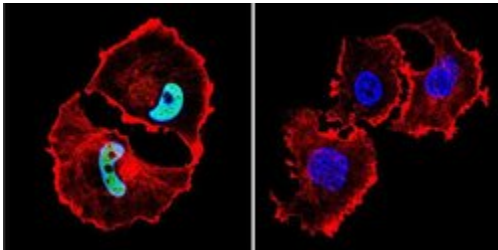
### HDAC1 Antibody (PA1-860) in IF

Immunofluorescent analysis of HDAC1 (green) in 3T3 cells. The cells were permeabilized with 0.1% Triton X-100 in TBS for 15 minutes, and blocked with 3% BSA in PBS (Product # 37525) for 15 minutes at room temperature. Cells were stained with a HDAC1 rabbit polyclonal antibody (Product # PA1-860), at a concentration of 10 µg/mL in blocking buffer for at least 1 hour at room temperature, and then incubated with a Goat anti-rabbit IgG Superclonal secondary antibody, Alexa Fluor 488 conjugate (Product # A27034) at a dilution of 1:1000 for 30 minutes at room temperature (green). Nuclei (blue) were stained with Hoechst 33342 dye (Product # 62249). Images were taken on a Thermo Scientific ToxInsight Instrument at 20X magnification.



### HDAC1 Antibody (PA1-860) in IF

Immunofluorescent analysis of HDAC1 in MCF-7 Cells. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with a HDAC1 polyclonal antibody (Product # PA1-860) at a dilution of 1:100 overnight at 4 C, washed with PBS and incubated with a DyLight-488 conjugated secondary antibody (Product # 35552). HDAC1 staining (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Images were taken at 60X magnification.



[View more figures on thermofisher.com](https://www.thermofisher.com)

## 65 References

### Western Blot (32)

#### Nature communications

#### Neuroepigenetic signatures of age and sex in the living human brain.

"PA1-860 was used in Western Blotting to measure in vivo expression of the epigenetic enzymes, histone deacetylases, across healthy human aging and between sexes using [11C]Martinostat positron emission tomography (PET) neuroimaging."

Authors: Gilbert TM,Zürcher NR,Catanese MC,Tseng CJ,Di Biase MA,Lyall AE,Hightower BG,Parmer AJ,Bhanot A,Wu CJ,Hibert ML,Kim M,Mahmood U,Stufflebeam SM,Schroeder FA,Wang C,Roffman JL,Holt DJ,Greve DN,Pasternak O, Kubicki M,Wey HY,Hooker JM

**Species**  
Human

**Dilution**  
1:2000000

**Year**  
2019

## Nature communications

### The class 3 PI3K coordinates autophagy and mitochondrial lipid catabolism by controlling nuclear receptor PPAR.

"PA1-860 was used in Western Blotting to study the role of class 3 PI3K in the regulation of autophagy and mitochondrial lipid metabolism."

Authors: Iershov A, Nemazanyy I, Alkhoury C, Girard M, Barth E, Cagnard N, Montagner A, Chretien D, Rugarli EI, Guillou H, Pende M, Panasyuk G

#### Species

Mouse

#### Dilution

1:1,000

#### Year

2019

[View more WB references on thermofisher.com](#)

## ChIP assay (10)

### Redox biology

### Downregulation of PARP1 transcription by CDK4/6 inhibitors sensitizes human lung cancer cells to anticancer drug-induced death by impairing OGG1-dependent base excision repair.

"PA1-860 was used in Chromatin immunoprecipitation to demonstrate that CDK4/6 inhibitors sensitise G1-arrested cells to anticancer drugs, since these cells require poly(ADP-ribose) polymerase 1-8-oxoguanine glycosylase functional interaction for cell survival."

Authors: Tempka D, Tokarz P, Chmielewska K, Kluska M, Pietrzak J, Rygielska, Virág L, Robaszkiewicz A

#### Species

Human

#### Dilution

Not Cited

#### Year

2018

### Scientific reports

### Downregulation of PARP1 transcription by promoter-associated E2F4-RBL2-HDAC1-BRM complex contributes to repression of pluripotency stem cell factors in human monocytes.

"Published figure using HDAC1 polyclonal antibody (Product # PA1-860) in ChIP assay"

Authors: Winik E, Poszaj T, Robaszkiewicz A

#### Species

Human

Not Applicable

#### Dilution

Not Cited

Not Cited

#### Year

2017

[View more ChIP references on thermofisher.com](#)

## More applications with references on thermofisher.com

ICC (3)

IF (7)

IHC (5)

IHC (P) (1)

Misc (1)

IP (6)

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