# HDAC1 Polyclonal Antibody

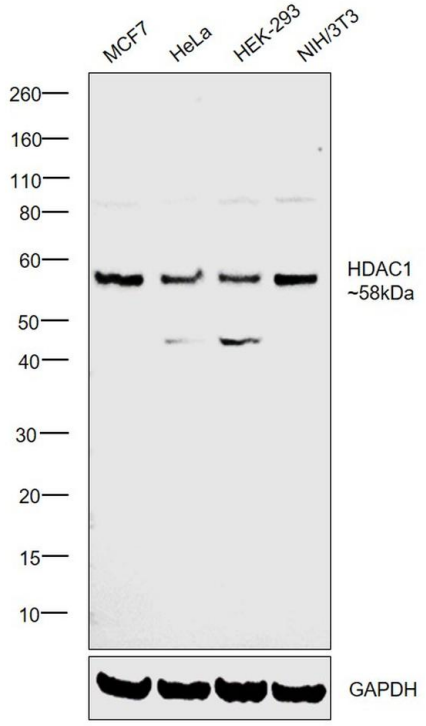
| Product Details | |
|---|---|
| Size | 500 µL |
| Species Reactivity | Human, Mouse |
| Host/Isotype | Rabbit / IgG |
| Class | Polyclonal |
| Type | Antibody |
| Conjugate | Unconjugated |
| Immunogen | Synthetic peptide derived from C-terminus of human HDAC-1 protein |
| Form | Liquid |
| Purification | Antigen affinity chromatography |
| Storage buffer | PBS, pH 7.6, with 1% BSA |
| Contains | 0.1% sodium azide |
| Storage conditions | Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles. |
| RRID | AB_2549912 |

| Applications | Tested Dilution | Publications |
|---|---|---|
| Western Blot (WB) | 1:1,000 | - |
| Immunohistochemistry (Paraffin) (IHC (P)) | 1:200 | - |
| Immunocytochemistry (ICC/IF) | 1:100 | - |
| ChIP assay (ChIP) | 2.5 µg/10^6 cells | - |

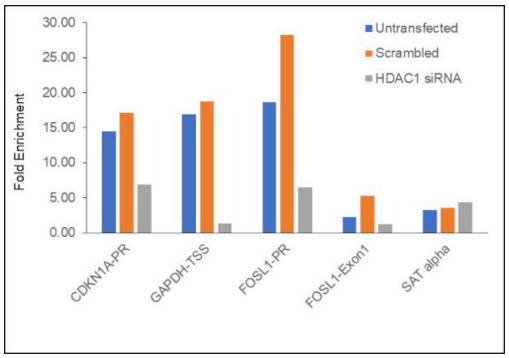
### Product Specific Information

Heat-mediated antigen retrieval is recommended prior to staining, using a 10mM citrate buffer, pH 6.0, for 10 minutes followed by cooling at room temperature for 20 min. Following antigen retrieval, incubate samples with primary antibody for 10 min at room temperature. A suggested positive control is tonsil or breast carcinoma.

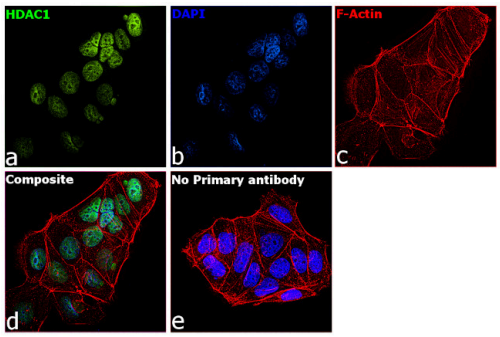
## Product Images For HDAC1 Polyclonal Antibody




**HDAC1 Antibody (PA5-32443) in WB**
Western blot was performed using Anti-HDAC1 Polyclonal Antibody (Product # PA5-32443) and a 58kDa band corresponding to HDAC1 was observed in all cell lines tested. Modified whole cell extracts (1% SDS) (30 µg lysate) of MCF7 (Lane 1), HeLa (Lane 2), HEK-293 (Lane 3) and NIH/3T3 (Lane 4) were electrophoresed using Novex® NuPAGE® 4-12 % Bis-Tris gel (Product # NP0322BOX). Resolved proteins were then transferred onto a nitrocellulose membrane (Product # IB23001) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with the primary antibody (1:1000 dilution) and detected by chemiluminescence with Goat anti-Rabbit IgG (Heavy Chain), Superclonal™ Recombinant Secondary Antibody, HRP (Product # A27036, 1: 4000 dilution) using the iBright FL 1000 (Product # A32752). Chemiluminescent detection was performed using Novex® ECL Chemiluminescent Substrate Reagent Kit (Product # WP20005).




**HDAC1 Antibody (PA5-32443)**
Antibody specificity was demonstrated by siRNA mediated knockdown of target protein. Knockdown of HDAC1 was achieved by transfecting MCF-7 cells with HDAC1 specific siRNAs (Silencer® select Product # S73 and S75). ChIP was performed using HDAC1 Polyclonal Antibody (Product # PA5-32443) on sheared chromatin from MCF-7 knockdown cells (grey bar), non-specific scrambled siRNA transfected cells (orange bar) and untransfected cells (blue bar). Decrease in fold enrichment of active binding region in siRNA mediated knockdown cells confirms that antibody is specific to HDAC1. {KD}




**HDAC1 Antibody (PA5-32443) in ICC/IF**
Immunofluorescence analysis of HDAC was performed using 70% confluent log phase HeLa cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 15 minutes, and blocked with 2% BSA for 1 hour at room temperature. The cells were labeled with HDAC1 Polyclonal Antibody (Product # PA5-32443) at 1:100 dilution in 0.1% BSA, incubated at 4 degree Celsius overnight and then labeled with Donkey anti-Rabbit IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor Plus 488 (Product # A32790) at a dilution of 1:2000 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: red) was stained with Rhodamine Phalloidin (Product # R415, 1:300). Panel d represents the merged image showing nuclear localization. Panel e represents control cells with no primary antibody to assess background. The images were captured at 60X magnification.

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