



## International Office

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**Research Use Only. Not for  
diagnostic or therapeutic use.**

## EB07186 - Goat Anti-Histone Deacetylase 1 Antibody

Size: 100µg specific antibody in 200µl



### Target Protein

**Principal Names:** HDAC1, histone deacetylase 1, DKFZp686H12203, GON-10, HD1, RPD3, RPD3L1, reduced potassium dependency, yeast homolog-like 1

**Official Symbol:** HDAC1

**Accession Number(s):** NP\_004955.2

**Human GeneID(s):** [3065](#)

### Immunogen

Peptide with sequence C-KPEAKGVKEEVK, from the C Terminus of the protein sequence according to NP\_004955.2.

Please note the [peptide](#) is available for sale.

### Purification and Storage

Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.

Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin.

Aliquot and store at -20°C. Minimize freezing and thawing.

### Applications Tested

**Peptide ELISA:** antibody detection limit dilution 1:4000.

**Western blot:** Appox 55kDa band observed in Human Duodenum and Lymph Node lysates and approx 70kDa band observed in lysates of cell lines HeLa and NIH3T3 (calculated MW of 55.1kDa according to Human NP\_004955.2 and Mouse NP\_032254.1). The observed 70kDa band represents the sumoylated protein according to David et al, J Biol Chem. 2002 Jun 28;277(26):23658-63; PMID: 11960997. Recommended concentration: 0.1-2µg/ml.

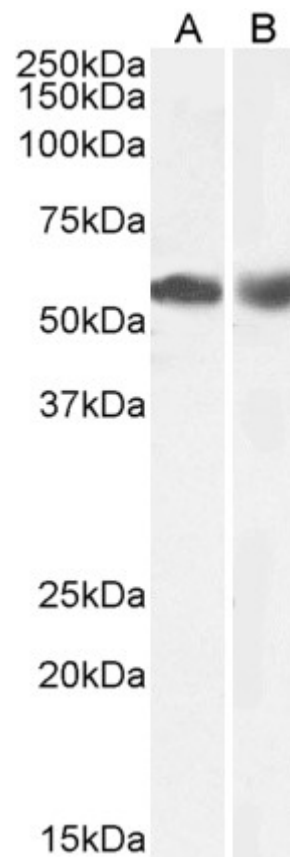
**Immunofluorescence:** Strong expression of the protein seen in the nucleus of NIH3T3 cells. Recommended concentration: 10µg/ml

**Chromatin Immunoprecipitation:** A 3.5-fold increased presence of H3 onto the Human P21 locus observed when comparing the precipitations using EB07186 with non-specific goat IgG to bring down HDAC1 in a chromatin lysate from MCF7 cells.

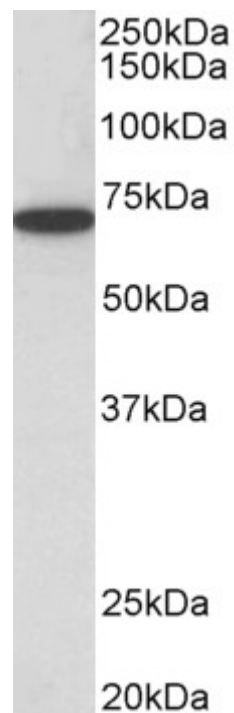
### Species Reactivity

**Tested:** Human, Mouse

**Expected from sequence similarity:** Human, Mouse, Rat, Dog



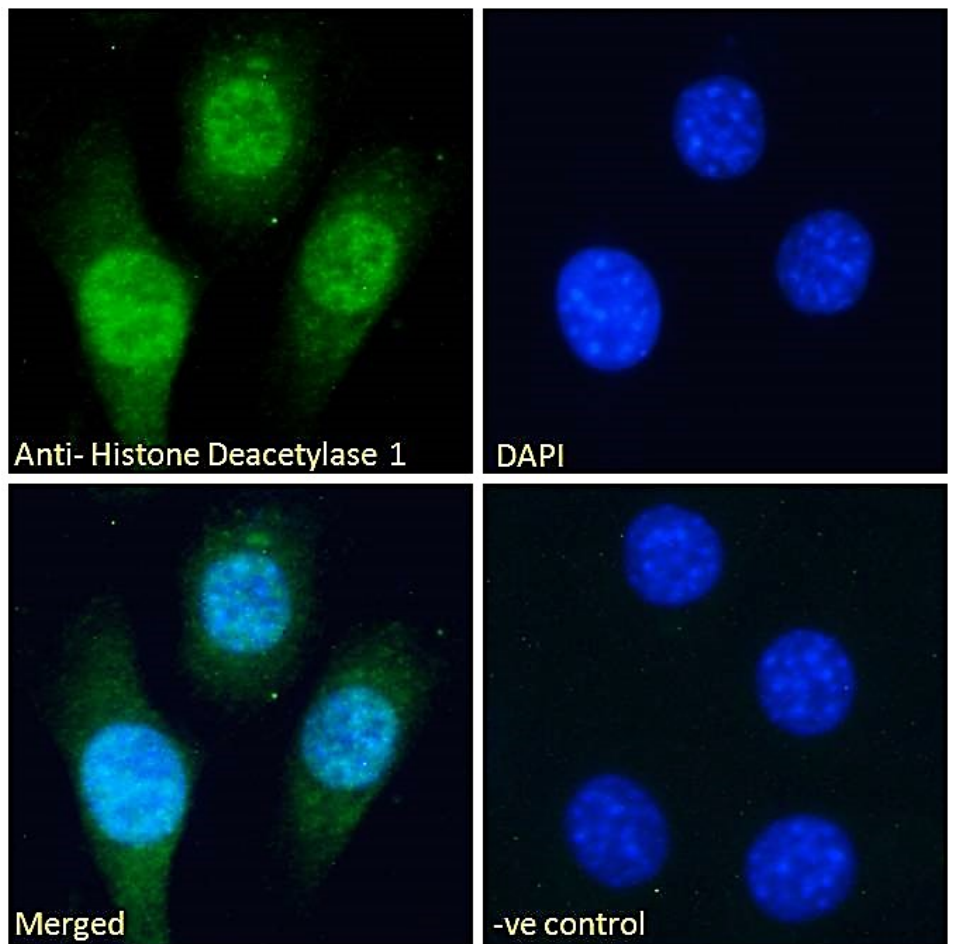
EB07186 (0.1 $\mu$ g/ml) staining of Human Duodenum (A) and Lymph Node (B) lysate (35 $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



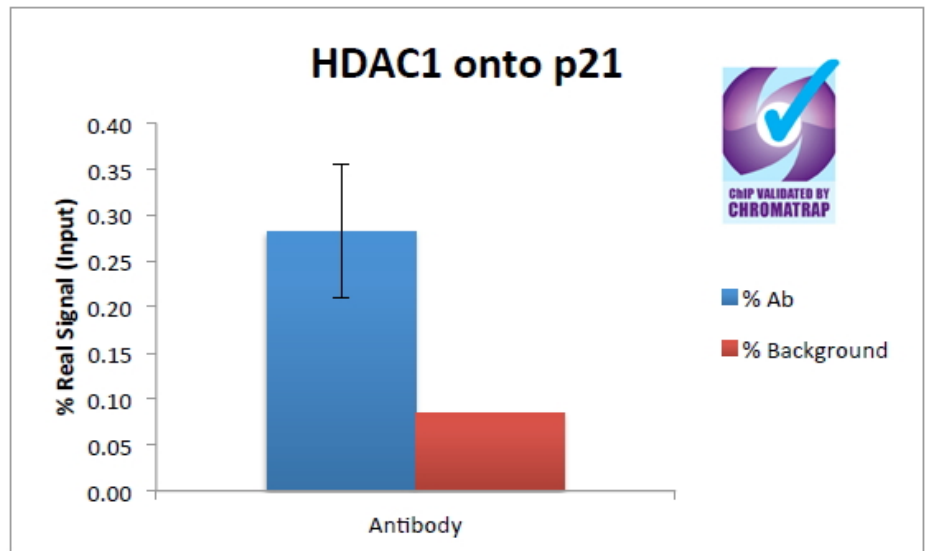
EB07186 (0.5 $\mu$ g/ml) staining of HeLa lysate (35 $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



EB07186 (0.1 $\mu$ g/ml) staining of NIH3T3 lysate (35 $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour.  
Detected by chemiluminescence



EB07186 Immunofluorescence analysis of paraformaldehyde fixed NIH3T3 cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10 $\mu$ g/ml) followed by Alexa Fluor 488 secondary antibody (2 $\mu$ g/ml), showing nuclear staining. The nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (10 $\mu$ g/ml) followed by Alexa Fluor 488 secondary antibody (2 $\mu$ g/ml).



ChIP of 2ug EB07186 with 1ug MCF7 chromatin using the Chromatrap® spin column sonication kit (Protein G) measuring H3 enrichment onto the p21 locus.