

Human HDAC1 protein, His tag

Cat. No. GTX00230-pro

Applications	Functional Assay	Package 10 μg
Species	Human	13

Applications

Application Note

Histone deacetylase 1 (HDAC1) is an enzyme which belongs to the histone deacetylase/acuc/apha family and is a component of the histone deacetylase complex. Histone acetylation and deacetylation, catalyzed by multisubunit complexes, play a key role in the regulation of eukaryotic gene expression. HDAC1 also interacts with retinoblastoma tumor-suppressor protein and this complex is a key element in the control of cell proliferation and differentiation. Besides, Specificity Protein 1 (Sp1) has been identified as an interactor of HDAC1, thus a binding ELISA assay was conducted to detect the interaction of recombinant human HDAC1 and recombinant human Sp1. Briefly, HDAC1 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of $100 \,\mu$ l were then transferred to Sp1-coated microtiter wells and incubated for 2h at 37° C. Wells were washed with PBST and incubated for 1h with anti-HDAC1 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37° C. Finally, add $50 \,\mu$ l stop solution to the wells and read at 450nm immediately. The binding activity of of HDAC1 and Sp1 was in a dose dependent manner.

Observed MW (kDa) 70 kDa.

Properties		
Form	Lyophilized powder	
Buffer	Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.	
Preservative	ProClin 300	
Storage	For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.	
Region/Sequence	Full length protein, N-terminal His-Tag; Met1~Ala482 (NP_004955.2)	
Expression System	E. coli	
Purity	> 95%	
Endotoxin	< 1 EU/μg	
Conjugation	Unconjugated	
Note	For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.	

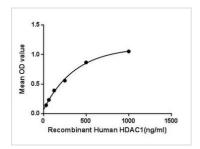


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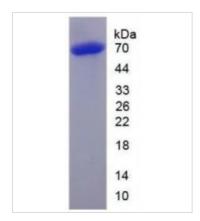


DATA IMAGES



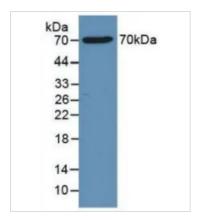
GTX00230-pro Functional Assay Image

Functional ELISA analysis of GTX00230-pro Human HDAC1 protein which can bind immobilized Sp1 protein.



GTX00230-pro Image

SDS-PAGE analysis of GTX00230-pro Human HDAC1 protein.



GTX00230-pro Image

WB analysis of GTX00230-pro Human HDAC1 protein.



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