

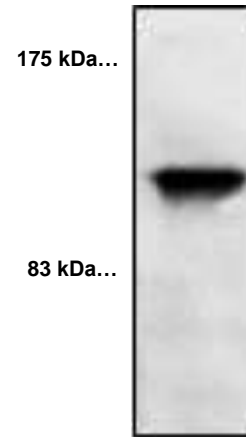
Histone Deacetylase 4 (HDAC4) Antibody

CATALOG NO:	3604-30T 30 µg (Trial size) 3604-100 100 µg
CONCENTRATION:	0.5 mg/ml
FORMULATION:	Affinity purified rabbit anti-HDAC4 polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 1% BSA, 0.03% ProClin®
SPECIES REACTIVITY:	Human, Mouse, Rat
STORAGE CONDITIONS:	Store at -20° C. For long-term storage, aliquot and freeze at -70° C. Avoid repeated freeze/thaw cycles.

BACKGROUND: HDAC4 is a member of the class II mammalian histone deacetylases, which consists of 1084 amino acid residues. Its C-terminal sequence is highly similar to the deacetylase domain of yeast HDA1. HDAC4, unlike other deacetylases, shuttles between the nucleus and cytoplasm in a process involving active nuclear export. Association of HDAC4 with 14-3-3 results in sequestration of HDAC4 protein in the cytoplasm. In the nucleus, HDAC4 associates with the myocyte enhancer factor MEF2A. Binding of HDAC4 to MEF2A results in the repression of MEF2A transcriptional activation. HDAC4 has also been shown to interact with other deacetylases such as HDAC3 as well as the repressors NcoR and SMART.

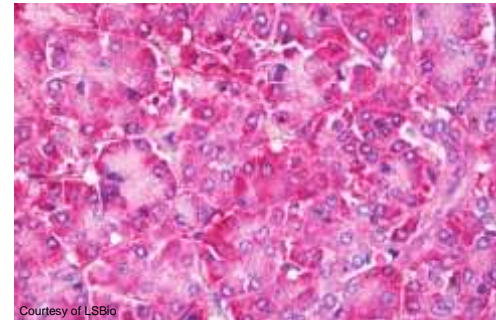
APPLICATION AND USAGE: The antibody can be used for Western blotting (1 µg/ml). However, the optimal conditions should be determined individually.

SPECIFICITY: The antibody detects ~140 kDa HDAC4 by Western blotting and Immunohistochemistry (5 µg/ml). It does not cross-react with other HDAC proteins including HDAC1, 2, 3, 5, 6, 7, and 8. Blocking peptide (Cat. No. 3604BP-50) is available separately.



Western blot with HDAC-4 Polyclonal Antibody – Cat # 3604-100
100 µg mouse brain lysate loaded.
Blocking/Dilution buffer: 5% NFDM (1 hr at RT) / TBST
Lox-1 Polyclonal Antibody used at 1:1000 dilution - O/N at 4°C.
Goat Anti-Rabbit IgG peroxidase conjugated used at 1:10,000 dilution – 1 hr at RT

Predicted band size: ~ 140 kDa.
Observed band size: ~ 140 kDa.



IHC staining of human pancreas with HDAC4 Polyclonal antibody: Immunohistochemistry of formalin fixed, paraffin-embedded tissue after heat-induced antigen retrieval. 5 µg/ml of antibody used for staining. After incubation with the primary antibody, slides were incubated with biotinylated secondary antibody, followed by alkaline phosphatase-streptavidin and chromogen.

RELATED PRODUCTS:

- HDAC4 Antibody (Cat # 3604A-100)
- HDAC4 Blocking Peptide (Cat # 3604BP-50)
- AR-42 (HDAC-42) (Cat # 2716-1, -5)
- HDAC Family Antibody Set (Cat # K333-11-30)
- HDAC3 Antibody (Cat # 3603-100)
- HDAC5 Antibody (Cat # 3605-100)

FOR RESEARCH USE ONLY! Not to be used on humans.