

Instruction Manual

Catalog Number	PK-AB577-3604C
Description	HDAC-4 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 HDA-1. HDAC-4, 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 HDAC 4 protein in the cytoplasm. In the nucleus, HDAC4 associates with the myocyte enhancer factor MEF2A. Binding of HDAC-4 to MEF2A results in the repression of MEF2A transcriptional activation. HDAC-4 has also been shown to interact with other deacetylases such as HDAC-3 as well as the corepressors NcoR and SMART.
Quantity	100 µg
Source / Host	Rabbit
Immunogen	Synthetic peptide surrounding amino acid 10 of human HDAC-4 (BV ID 226).
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse, Rat, Chicken
Specificity	The antibody detects ~140 kDa human HDAC-4. Reactivity to other species has not been determined.
Formulation	100 µg (0.2 mg/ml) affinity purified rabbit anti-HDAC-4 polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, 0.01% thimerosal.
Reconstitution	Can be diluted in other aqueous buffers at the concentrations determined for the respective application.
Storage & Stability	Store at -20°C. For long-term storage, aliquot and freeze at -70°C. Avoid repeated freeze/thaw cycles.
Applications	The antibody can be used for Western blotting (0.5-4 µg/ml). However, the optimal conditions should be determined individually. Blocking peptide is available separately (Cat.# PK-AB577-3604P).

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