

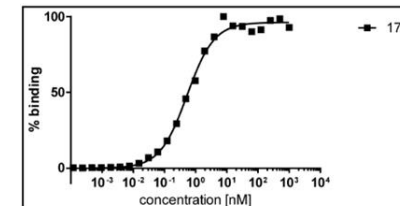
## Anti-HDAC6 Monoclonal Antibody (ZnF domain-specific)

<b>CATALOG NO:</b>	A1489-100
<b>AMOUNT:</b>	100 µg
<b>ALTERNATE NAME:</b>	KIAA0901, JM21, HD6, HDAC6-ZnF
<b>ISOTYPE / FORMAT:</b>	Mouse IgG
<b>CLONALITY:</b>	Monoclonal
<b>CLONE:</b>	178
<b>IMMUNOGEN:</b>	Human Histone deacetylase 6 (HDAC6; sequence NP_006035.2, UniProtKB - Q9UBN7)
<b>SPECIES REACTIVITY:</b>	Human
<b>FORM:</b>	Liquid
<b>SPECIFICITY:</b>	The antibody detects epitope in ZnF domain of HDAC6
<b>PURIFICATION:</b>	Affinity purified from hybridoma culture supernatant (Protein A)
<b>FORMULATION:</b>	1 mg/ml in PBS, pH 7.4, 0.02% sodium azide
<b>STORAGE CONDITIONS:</b>	Store at -20 °C for long term storage, 4 °C for short term storage, avoid repeated freezing/thawing cycles
<b>DESCRIPTION:</b>	The affinity purified mouse monoclonal antibody is immunospecific for the ZnF domain of human histone deacetylase 6 (HDAC6) as determined by ELISA. HDAC6 belongs to the class II of the histone deacetylase family (EC 3.5.1.98). The protein of molecular mass 131 kDa consists of two catalytic domains, the serine-glutamate-rich SE14 domain and the ubiquitin-binding ZnF domain. HDAC6 shuttles between the nucleus and the cytoplasm, but its localization is predominantly cytoplasmic. The enzyme deacetylates various substrates including α-tubulin, HSP90, cortactin, histones and other proteins. Described protein plays an important role in microtubule-dependent cell motility, apoptosis, cell signaling and transcriptional regulation, protein degradation, immune response and DNA repair. HDAC6 is linked to several neuronal diseases and carcinogenesis.
<b>APPLICATION:</b>	<i>ELISA:</i> 0.5 – 5µg/ml; <i>Immunocytochemistry:</i> 5 – 50 µg/ml; IP: 1 – 2 µg mAb/1 µg purified HDAC6

*(Please note that working concentration should be optimized for each technique by each laboratory)*

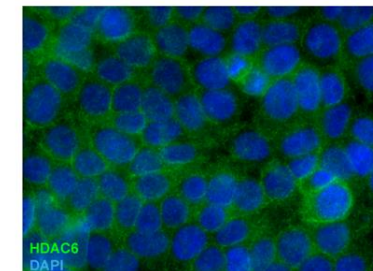
### ELISA

Detection of human HDAC6 by anti-HDAC6-ZnF mAb using ELISA. MaxiSorp plate was coated by recombinant human HDAC6. BSA-blocked plate was probed with dilution series of anti-HDAC6-ZnF mAb ( $10^{-4}$  -  $10^3$  nM) followed by incubation with anti-mouse IgG secondary antibody conjugated to HRP. Colorimetric signal of processed OPD substrate was measured on ELISA reader at 492 nm.



### Immunocytochemistry

Detection of human endogenous HDAC6 by anti-HDAC6-ZnF mAb (25 µg/ml ON) in formaldehyde-fixed and Triton-permeabilized HEK293T cells. Coverslips were incubated with anti-mouse Ab conjugated to AlexaFluor488. Slides were counterstained with DAPI.



### RELATED PRODUCTS:

- HDAC6 Activity Assay kit (**Cat. No. K466-100**)
- HDAC6 Inhibitor Screening kit (**Cat. No. K465-100**)
- HDAC Activity Fluorometric Assay Kit (**Cat. No. K330-100**)
- HDAC Activity Colorimetric Assay Kit (**Cat. No. K331-100**)
- InSitu HDAC Activity Fluorometric Assay Kit (**Cat. No. K339-100**)
- HDAC6, human recombinant (**Cat. No. 7534-10**)
- Human CellExp™ HDAC6, Human Recombinant, Active (**Cat. No. P1265-50**)
- HDAC6 Antibody (**Cat. No. 3606-30T, -100**)
- Tubacin (**Cat. No. 1984-250, -1000**)

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