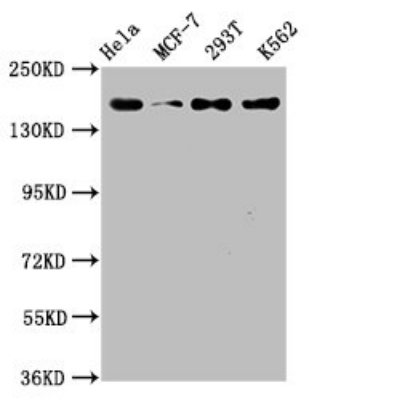
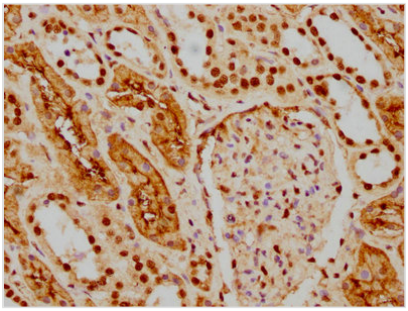
HDAC9 Antibody

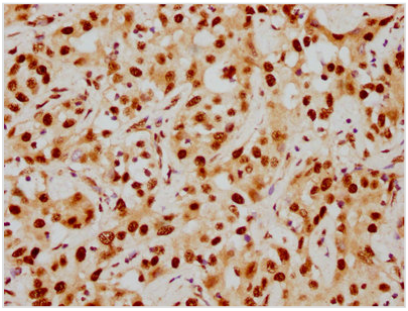
Product Code	CSB-RA010245A0HU
Abbreviation	Histone deacetylase 9
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	Q9UKV0
Immunogen	A synthesized peptide derived from human HDAC9
Species Reactivity	Human
Tested Applications	ELISA, WB, IHC, IF; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200, IF:1:20-1:200
Relevance	Responsible for the deacetylation of lysine residues on the N-terminal part of the core histones (H2A, H2B, H3 and H4). Histone deacetylation gives a tag for epigenetic repression and plays an important role in transcriptional regulation, cell cycle progression and developmental events. Represses MEF2-dependent transcription.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Alias	Histone deacetylase 9, HD9, Histone deacetylase 7B, HD7, HD7b, Histone deacetylase-related protein, MEF2-interacting transcription repressor MITR, HDAC9, HDAC7, HDAC7B, HDRP, KIAA0744, MITR
Immunogen Species	Homo sapiens (Human)
Research Area	Epigenetics and Nuclear Signaling
Gene Names	HDAC9
Accession NO.	1F2
Image	



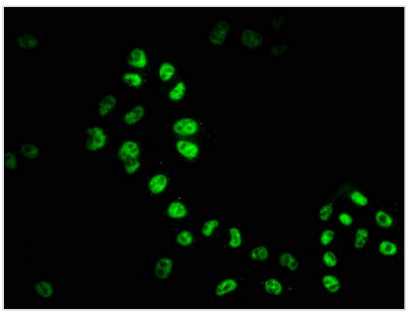
Western Blot
Positive WB detected in: Hela whole cell lysate, MCF-7 whole cell lysate, 293T whole cell lysate, K562 whole cell lysate
All lanes: HDAC9 antibody at 1.54µg/ml
Secondary
Goat polyclonal to rabbit IgG at 1/50000 dilution
Predicted band size: 112, 102, 66, 98, 118, 113, 61, 63, 58 KDa
Observed band size: 160 KDa



IHC image of CSB-RA010245A0HU diluted at 1:154 and staining in paraffin-embedded human kidney tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



IHC image of CSB-RA010245A0HU diluted at 1:154 and staining in paraffin-embedded human liver cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



Immunofluorescence staining of Hela cells with CSB-RA010245A0HU at 1:51, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. The secondary antibody was Alexa Fluor 488-congugated AffiniPure Goat Anti-Rabbit IgG (H+L).

Description

CUSABIO cloned HDAC9 antibody-coding genes into plasma vectors and then transfected these vector clones into mammalian cells using a lipid-based transfection reagent. Following transient expression, the recombinant antibodies against HDAC9 were harvested and characterized. The recombinant HDAC9 antibody was purified by affinity-chromatography from the culture medium. It can be used to detect HDAC9 protein from Human in the ELISA, WB, IHC, IF.

HDAC9 is an enzyme responsible for the removal of acetyl moieties from the ?-amino groups of conserved lysine residues in the N-terminal tail of histones. HDAC9 can freely move between the nucleus and the cytoplasm and interacts with histone and non-histone substrates to facilitate tissue-specific transcriptional control. Biologically, HDAC9 regulates a wide range of physiological functions in both normal and diseased states, including cardiac muscle development, bone formation, T-regulatory cell function, neurological diseases, muscle differentiation, adipocyte differentiation, and cancer. HDAC9 overexpression is also prevalent in cancer cells, where it affects the expression and function of a number of key proteins involved in cancer development.