### For Research Use Only

# HDAC4 Polyclonal antibody

Catalog Number: 29252-1-AP



**Basic Information** 

Catalog Number: GenBank Accession Number:

29252-1-AP BC039904 GeneID (NCBI): Size:

150ul, Concentration: 900 ug/ml by

Nanodrop: **UNIPROT ID:** P56524 Rabbit Full Name:

Isotype: histone deacetylase 4

120-140 kDa

IgG Calculated MW: Immunogen Catalog Number: 972 aa, 106 kDa AG30752 Observed MW:

**Purification Method:** Antigen affinity purification Recommended Dilutions: WB 1:2000-1:10000 IHC 1:50-1:500

**Applications** 

**Tested Applications:** WB, IHC, ELISA

Species Specificity:

Human

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

#### Positive Controls:

WB: HEK-293T cells, HeLa cells, Jurkat cells

IHC: human ovary tumor tissue, human lung cancer

### **Background Information**

HDAC4 (Histone deacetylase 4) belongs to class II of the histone deacetylase/acuc/apha family. It possesses histone deacetylase activity and represses transcription when tethered to a promoter. Histone deacetylation gives a tag for epigenetic repression and plays a role in transcriptional regulation, cell cycle progression and  $developmental\ events.\ It\ is\ involved\ in\ muscle\ maturation\ by\ its\ interaction\ with\ the\ myocyte\ enhancer\ factors\ such a property of the maturation of the myocyte enhancer factors\ such a property of the myocyte enhanc$ as MEF2A, MEF2C and MEF2D. HDAC4 is required for TGFbeta1-induced myofibroblastic differentiation (PMID: 17610967). HDAC4 encoded by an allele associated with mental retardation is a gain-of-function nuclear repressor that abolishes transcription and synaptic transmission (PMID: 23141539).

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

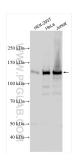
Storage Buffer

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

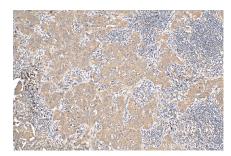
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

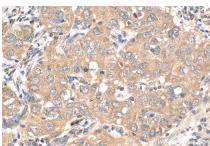
## Selected Validation Data



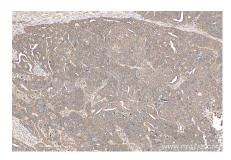
Various lysates were subjected to SDS PAGE followed by western blot with 29252-1-AP (HDAC4 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



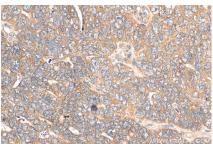
Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 29252-1-AP (HDAC 4 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 29252-1-AP (HDAC 4 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human ovary tumor tissue slide using 29252-1-AP (HDAC 4 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human ovary tumor tissue slide using 29252-1-AP (HDAC 4 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).