



SMAP45 Polyclonal Antibody

Catalog No	YP-Ab-02020
Isotype	IgG
Reactivity	Human;Mouse;Rat;Monkey
Applications	WB;IHC;IF;ELISA
Gene Name	HDAC3
Protein Name	Histone deacetylase 3
Immunogen	The antiserum was produced against synthesized peptide derived from human HDAC3. AA range:379-428
Specificity	SMAP45 Polyclonal Antibody detects endogenous levels of SMAP45 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	HDAC3; Histone deacetylase 3; HD3; RPD3-2; SMAP45
Observed Band	50kD
Cell Pathway	Nucleus . Cytoplasm . Cytoplasm, cytosol . Colocalizes with XBP1 and AKT1 in the cytoplasm (PubMed:25190803). Predominantly expressed in the nucleus in the presence of CCAR2 (PubMed:21030595).
Tissue Specificity	Widely expressed.
Function	<p>catalytic activity:Hydrolysis of an N(6)-acetyl-lysine residue of a histone to yield a deacetylated histone.,function: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. Histone deacetylases act via the formation of large multiprotein complexes. Probably participates in the regulation of transcription through its binding to the zinc-finger transcription factor YY1; increases YY1 repression activity. Required to repress transcription of the POU1F1 transcription factor.,PTM:Sumoylated in vitro.,similarity:Belongs to the histone deacetylase family. Type 1 subfamily.,subunit:Interacts with HDAC7 and HDAC9. Forms a heterologous complex at least with YY1. Intera</p>

**Background**

Histones play a critical role in transcriptional regulation, cell cycle progression, and developmental events. Histone acetylation/deacetylation alters chromosome structure and affects transcription factor access to DNA. The protein encoded by this gene belongs to the histone deacetylase/acuc/apha family. It has histone deacetylase activity and represses transcription when tethered to a promoter. It may participate in the regulation of transcription through its binding with the zinc-finger transcription factor YY1. This protein can also down-regulate p53 function and thus modulate cell growth and apoptosis. This gene is regarded as a potential tumor suppressor gene. [provided by RefSeq, Jul 2008],

matters needing attention

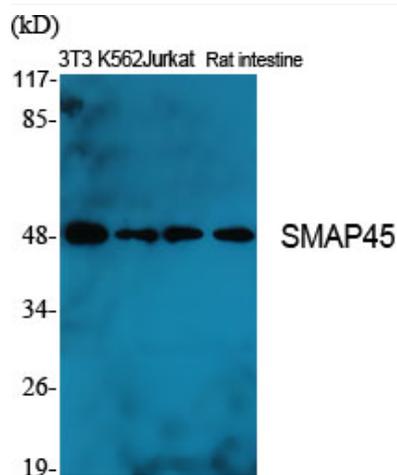
Avoid repeated freezing and thawing!

Usage suggestions

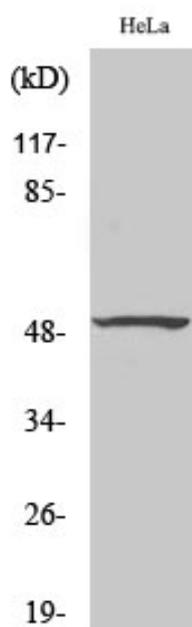
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



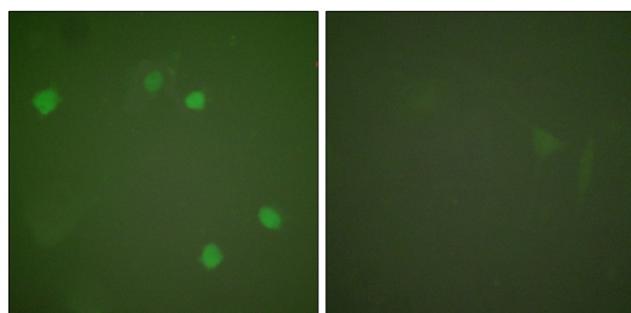
Products Images



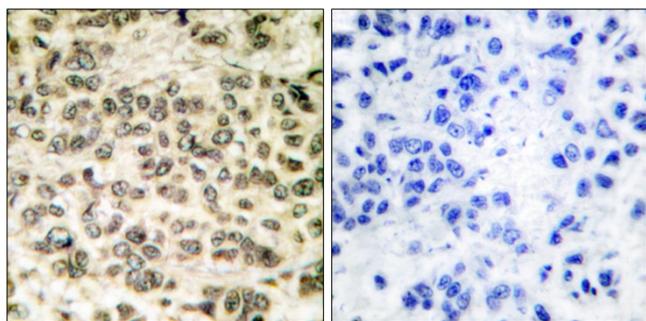
Western Blot analysis of various cells using SMAP45 Polyclonal Antibody diluted at 1:2000



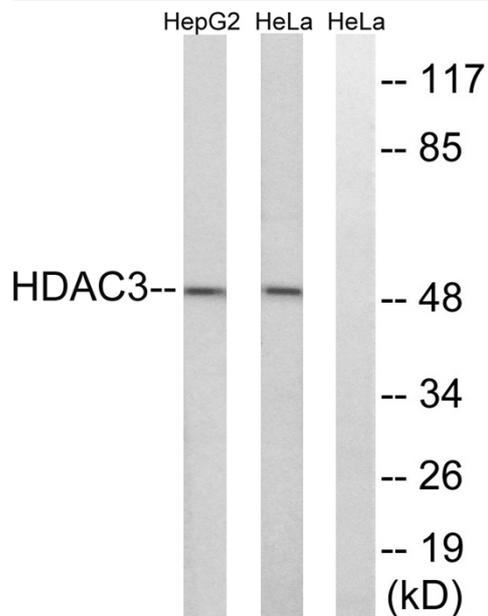
Western Blot analysis of HepG2 cells using SMAP45 Polyclonal Antibody diluted at 1:2000



Immunofluorescence analysis of COS7 cells, using HDAC3 Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using HDAC3 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from HepG2 and HeLa cells, using HDAC3 Antibody. The lane on the right is blocked with the synthesized peptide.