APE906Hu01 100μg
Active Histone Deacetylase 6 (HDAC6)
Organism Species: *Homo sapiens (Human)*
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1st Edition (Apr, 2016)

[PROPERTIES]

Source: Prokaryotic expression.
Host: *E. coli*
Residues: Val166~Leu348
Tags: N-terminal His-tag
Purity: >95%
Endotoxin Level: <1.0EU per 1μg (determined by the LAL method).
Buffer Formulation: PBS, pH7.4, containing 0.01% SKL, 5% Trehalose.
Applications: Cell culture; Activity Assays.
(May be suitable for use in other assays to be determined by the end user.)
Predicted isoelectric point: 6.6
Predicted Molecular Mass: 21.8kDa
Accurate Molecular Mass: 22kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.
Store at 2-8°C for one month.
Aliquot and store at -80°C for 12 months.

Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37ºC for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

[SEQUENCE]

VLADT YDSVYLHPNS YSCACLASGS VLRLVDAVLG AEIRNGMAII RPPGHHAQHS LMDGYCMFNH VAVAARYAQQ KHRIRRVLIV DWDVHHGQGT QFTFDQDPSV LYFSIHRYEQ GRFWPHLKAS NWSTT GFGQG QGYTINVPWN QVGMRDADYI AAFLHVLLPV ALEFQPQLVL VAAGFDAL

[ACTIVITY]

Histone Deacetylase 6 (HDAC6) belongs to class II of the histone deacetylase/acuc/apha family. It contains an internal duplication of two catalytic domains that appear to function independently of each other. This protein possesses histone deacetylase activity and represses transcription. HDAC6 also affects transcription and translation by regulating the heat-shock protein 90 (Hsp90) and stress granules (SGs), respectively. Besides, Sirtuin 2 (SIRT2) has been identified as an interactor of HDAC6, thus a binding ELISA assay was conducted to detect the interaction of recombinant human HDAC6 and recombinant human SIRT2. Briefly, HDAC6 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100μl were then transferred to SIRT2-coated microtiter wells and incubated for 2h at 37℃. Wells were washed with PBST and incubated for 1h with anti-HDAC6 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50μL stop solution to the wells and read at 450nm immediately. The binding activity of HDAC6 and SIRT2 was shown in Figure 1, and this effect was in a dose dependent manner.

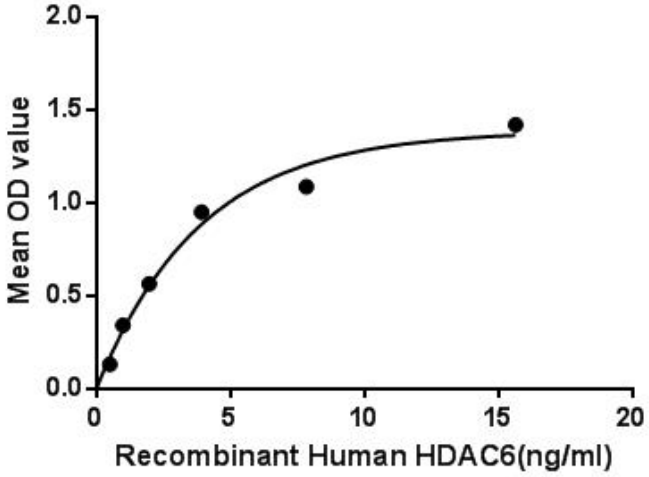

Figure 1. The binding activity of HDAC6 with SIRT2

[IDENTIFICATION]

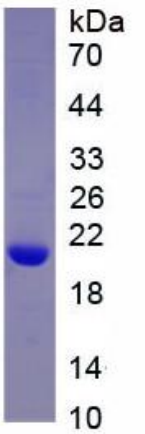

Figure 2. SDS-PAGE

Sample: Active recombinant HDAC6, Human

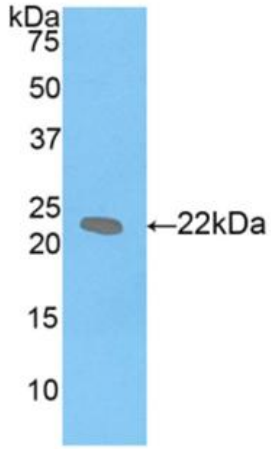

Figure 3. Western Blot

Sample: Recombinant HDAC6, Human;

Antibody: Rabbit Anti- Human HDAC6 Ab (PAE906Hu01)

[IMPORTANT NOTE]

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.