

APA228Hu01 100μg

Active Anti Mullerian Hormone (AMH)

Organism Species: Homo sapiens (Human)

Instruction manual

FOR IN VITRO USE AND RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1st Edition (Apr, 2016)

[PROPERTIES]

Source: Prokaryotic expression.

Host: E. coli

Residues: Ala453~Arg560 Tags: N-terminal His-tag

Purity: >95%

Buffer Formulation: 20mM Tris, 150mM NaCl, pH8.0, containing 0.05% sarcosyl

and 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: 7.7

Predicted Molecular Mass: 12.8kDa

Accurate Molecular Mass: 14kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) 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 37°C 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]

AGATAADG PCALRELSVD LRAERSVLIP ETYQANNCQG VCGWPQSDRN PRYGNHVVLL LKMQVRGAAL ARPPCCVPTA YAGKLLISLS EERISAHHVP NMVATECGCR

[ACTIVITY]

Anti-Müllerian hormone (AMH), also named Müllerian inhibiting substance (MIS) belongs to a tissue-specific TGF-beta superfamily growth factor. It can be expressed by male sertoli cells and postnatal testis, and ovarian granulosa cells of females postpartum. AMH expression is critical to sex differentiation at a specific time during fetal development, it appears to be tightly regulated by SF1, GATA factors, DAX1 and FSH. AMH signals through a characteristic receptor consisting of a type I and a type II receptor serine/threonine kinase. Especially the type II receptor is unique and specific receptor for AMH. Besides, Mothers Against Decapentaplegic Homolog 9 (Smad9) has been identified as an interactor of AMH, thus a binding ELISA assay was conducted to detect the interaction of recombinant human AMH and recombinant human (Smad9) Briefly, AMH were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to Smad9-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-AMH 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°C. Finally, add 50µL stop

solution to the wells and read at 450nm immediately. The binding activity of of AMH and Smad9 was shown in Figure 1, and this effect was in a dose dependent manner.

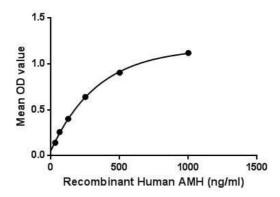


Figure 1. The binding activity of AMH with Smad9.

[IDENTIFICATION]

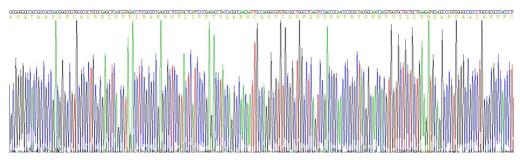


Figure 2. Gene Sequencing (extract)

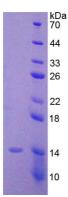


Figure 3. SDS-PAGE

Sample: Active recombinant AMH, Human

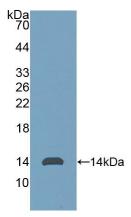


Figure 4. Western Blot

Sample: Recombinant AMH, Human;

Antibody: Rabbit Anti-Human AMH Ab (PAA228Hu01)