APA228Hu01 100µg Active Anti Mullerian Hormone (AMH) Organism Species: Homo sapiens (Human) *Instruction manual*

FOR RESEARCH USE ONLY NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1th Edition (Apr, 2016)

[PROPERTIES]

Source: Prokaryotic expression. Host: *E. coli* 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.

[<u>USAGE</u>]

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.

[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.

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Figure 1. The binding activity of AMH with Smad9.

[IDENTIFICATION]



Figure 2. SDS-PAGE

Sample: Active recombinant AMH, Human

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Figure 3. Western Blot Sample: Recombinant AMH, Human; Antibody: Rabbit Anti-Human AMH Ab (PAA228Hu01)

[IMPORTANT NOTE]

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