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Anti-AMH Picoband Antibody

Catalog # ABO10109

Product Information

Application	WB
Primary Accession	P03971
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Muellerian-inhibiting factor(AMH) detection. Tested with WB in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	268
Other Names	Muellerian-inhibiting factor, Anti-Muellerian hormone, AMH, Muellerian-inhibiting substance, MIS, AMH, MIF
Calculated MW	59195
Application Details	Western blot, 0.1-0.5 □g/ml, Human
Subcellular Localization	Secreted.
Source	Eukaryota
Protein Name	Muellerian-inhibiting factor
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E.coli-derived human AMH recombinant protein (Position: A75-E141). Human AMH shares 66.7% amino acid (aa) sequence identity with both mouse and rat AMH.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

Protein Information

Name	AMH (HGNC:464)
Function	The anti-Muellerian hormone (AMH) plays an important role in several reproductive functions (PubMed:14742691, PubMed:34155118, PubMed:3754790, PubMed:8469238). Anti-Muellerian hormone binds and activates AMHR2, its specific type-II receptor, that heterodimerizes with type-I receptors (ACVR1 and BMPR1A) to regulate target gene expression through downstream SMAD protein signal transduction (PubMed:20861221, PubMed:34155118). Produced and secreted by Sertoli cells of the male fetus, anti-Muellerian hormone induces Muellerian duct regression during male fetal sexual differentiation (PubMed:34155118, PubMed:3754790, PubMed:8469238). In female, it is produced by granulosa cells of the preantral and small antral follicles and acts as a negative regulator of the primordial to primary follicle transition and decreases FSH sensitivity of growing follicles (PubMed:14742691). Also plays a role in Leydig cell differentiation and function (By similarity).
Cellular Location	Secreted
Tissue Location	In ovaries, AMH is detected in granulosa cells of early growing follicles.

Background

Anti-M □¼llerian hormone (AMH), also known as MIF or MIS, is a protein that in humans is encoded by the AMH gene. It is a hormone that inhibits the development of the M □¼llerian ducts (paramesonephric ducts) in the male embryo. Expression of AMH is activated by SOX9 in the male Sertoli cells and causes the irreversible regression of the M □¼llerian ducts. Because 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. This protein also plays a role in Leydig cell differentiation and function and follicular development in adult females. Mutations in this gene result in persistent Mullerian duct syndrome.

Images

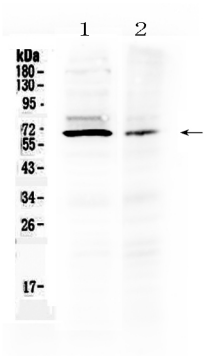


Figure 1. Western blot analysis of AMH using anti- AMH antibody (ABO10109). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: 293T whole Cell lysates, Lane 2: COLO320 whole Cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti- AMH antigen affinity purified polyclonal antibody (Catalog # ABO10109) at 0.5 □¼g/mL overnight at 4 □°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for AMH4 at approximately 65KD. The expected band size for AMH is at 59KD.

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