

Recombinant Mouse AMH Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51354

Size: 10ug, 100ug

Protein Name: Anti-Muellerian hormone (AMH) (Muellerian-inhibiting factor) (Muellerian-inhibiting substance) (MIS)

Synonym: Amh

UniProt ID: P27106

UniProt Link: www.uniprot.org/uniprotkb/P27106/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 554 AA

Molecular Weight: 59 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MQGPHLSPLVLLLATMGAVLQPEAVENLATNTRGLIFLEDELWPPSSPPEPLCLVTVRGEGNTSRAS
LRVVGGLNSYEYAFLEAVQESRWGPQDLATFGVCSTDSQATLPALQRLGAWLGETGEQQLLVHLA
EVIWEPELLLKFEPPPGGASRWEQALLVYPGPGPQVTVTGTGLRGTQNLCPTRDTRYLVLTVD
PAGAWSGSGLILTLQPSREGATLSIDQLQAFLFGSDSRCFTRMTPTLVVLPPAEPSPQPAHGQLDTM
PFPQPGLSLEPEALPHSADPFLETLTRLVRLRGPLTQASNTQLALDPGALASFPQGLVNLSDPAAL
GRLLDWEELLLLLSPAAATEREPMPLHGPASAPWAAGLQRRVAVELQAAASELRDLPGLPPTAPP
LLARLLALCPNDSRSSGDPLRALLLKALQGLRAEWHGREGRGRTGRSAGTGTGPGCALRELSVDL
RAERSVLIPETYQANNCQGACAWPQSDRNPRYGNHVLLLLKMQARGAALGRLPCCVPTAYAGKLLI
SLSEERISAHHPNMVATECGCV

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Anti-Muellerian hormone (AMH) (Muellerian-inhibiting factor) (Muellerian-inhibiting substance) (MIS) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: The anti-Muellerian hormone (AMH) plays an important role in several reproductive functions (PubMed:11606457, PubMed:11861535, PubMed:1782869, PubMed:9435237). 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 (By similarity). Produced and secreted by Sertoli cells of the male fetus, anti-Muellerian hormone induces Muellerian duct regression during male fetal sexual differentiation (PubMed:1782869, PubMed:9435237). 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:11606457, PubMed:11861535). Also plays a role in Leydig cell differentiation and function (PubMed:1782869, PubMed:9435237).; Plays an important role in several reproductive functions, including Muellerian duct regression during male fetal sexual differentiation and in the adult plays a role in Leydig cell differentiation and function (PubMed:1782869, PubMed:9435237). In female acts as a negative regulator of the primordial to primary follicle transition and decreases FSH sensitivity of growing follicles (PubMed:11606457, PubMed:11861535). Binds to its sole type II receptor, AMHR2 that recruits type I receptors ACVR1 and BMPR1A which subsequently activates the Smad pathway (By similarity).

Subcellular Localization: Secreted .

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.