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AMH Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9940C

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P03971
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	59195
Antigen Region	424-451

Additional Information

Gene ID	268
Other Names	Muellerian-inhibiting factor, Anti-Muellerian hormone, AMH, Muellerian-inhibiting substance, MIS, AMH, MIF
Target/Specificity	This AMH antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 424-451 amino acids of human AMH.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:25 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	AMH Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

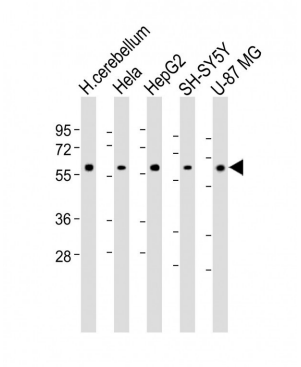
Name	AMH (HGNC:464)
Function	The anti-Muellerian hormone (AMH) plays an important role in several reproductive functions (PubMed:14742691, PubMed:34155118, PubMed:3754790, PubMed:8469238). Anti-Muellerian hormone binds and activates AMHR2, its specific type-II receptor, that heterodimerizes with type-I 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.

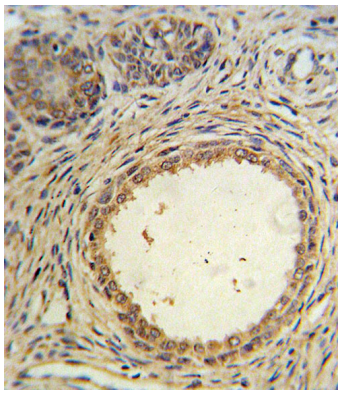
Background

Anti mullerian hormone (AMH) is a member of the TGF beta superfamily. It is secreted as a homodimeric 140kD disulphide linked precursor that is cleaved to release the mature 30kD homodimer. Originally classified as a foetal testicular hormone that inhibits Mullerian duct development, AMH is expressed post natally by immature Sertoli cells, and to a lesser degree by granulosa cells. AMH plays a role in testicular differentiation and in the regulation of ovarian follicle growth.

Images

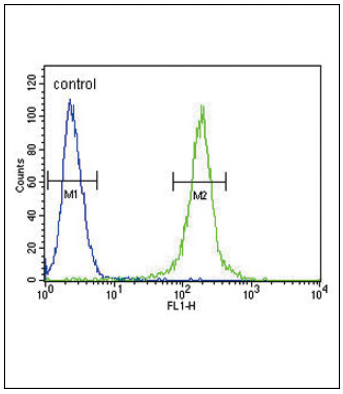


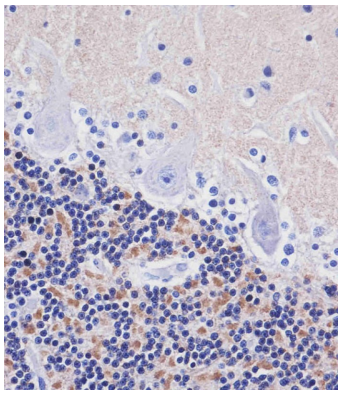
All lanes : Anti-AMH Antibody (Center) at 1:1000-1:2000 dilution Lane 1: Human cerebellum lysate Lane 2: Hela whole cell lysate Lane 3: HepG2 whole cell lysate Lane 4: SH-SY5Y whole cell lysate Lane 5: U-87 MG whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 59 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



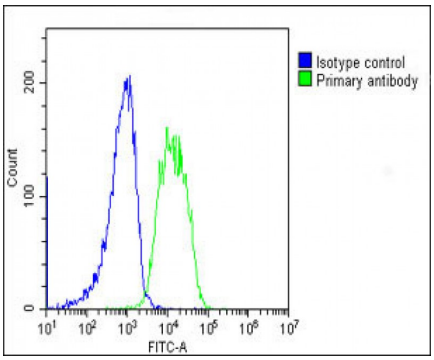
AMH Antibody (Center) (Cat. #AP9940c) IHC analysis in formalin fixed and paraffin embedded prostate carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the AMH Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

AMH Antibody (Center) (Cat. #AP9940c) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

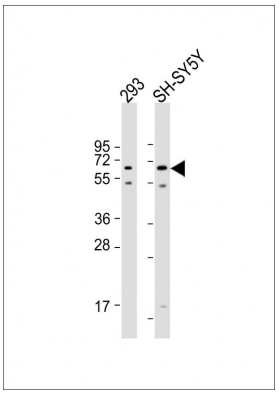




AP9940c staining AMH in human cerebellum tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



Overlay histogram showing SH-SY5Y cells stained with AP9940c(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP9940c, 1:25 dilution) for 60 min at 37ºC. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OH191631) at 1/200 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.



All lanes : Anti-AMH Antibody (Center) at 1:2000 dilution Lane 1: 293 whole cell lysate Lane 2: SH-SY5Y whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 59 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Citations

- FOXL2 Is an Essential Activator of SF-1-Induced Transcriptional Regulation of Anti-Müllerian Hormone in Human Granulosa Cells.