

Anti-DMRT1 Antibody

Catalog # ABO12761

Product Information

Application	WB, IHC-P
Primary Accession	Q9Y5R6
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Doublesex- and mab-3-related transcription factor 1(DMRT1) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
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Additional Information

Gene ID	1761
Other Names	Doublesex- and mab-3-related transcription factor 1, DM domain expressed in testis protein 1, DMRT1, DMT1
Calculated MW	39473
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat
Subcellular Localization	Nucleus .
Tissue Specificity	Testis-specific. Expressed in prostate cancer (at protein level). .
Source	Eukaryota
Protein Name	Doublesex- and mab-3-related transcription factor 1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human DMRT1 (98-128aa RDCQCKKCNLIAERQVRMAAQVALRRQQAQE), different from the related mouse sequence by one amino acid.
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.
Sequence Similarities	Belongs to the DMRT family.

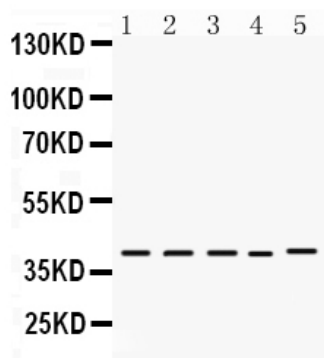
Protein Information

Name	DMRT1
Synonyms	DMT1
Function	Transcription factor that plays a key role in male sex determination and differentiation by controlling testis development and male germ cell proliferation. Plays a central role in spermatogonia by inhibiting meiosis in undifferentiated spermatogonia and promoting mitosis, leading to spermatogonial development and allowing abundant and continuous production of sperm. Acts both as a transcription repressor and activator: prevents meiosis by restricting retinoic acid (RA)-dependent transcription and repressing STRA8 expression and promotes spermatogonial development by activating spermatogonial differentiation genes, such as SOHLH1. Also plays a key role in postnatal sex maintenance by maintaining testis determination and preventing feminization: represses transcription of female promoting genes such as FOXL2 and activates male-specific genes. May act as a tumor suppressor. May also play a minor role in oogenesis (By similarity).
Cellular Location	Nucleus {ECO:0000255 PROSITE-ProRule:PRU00070}.
Tissue Location	Testis-specific. Expressed in prostate cancer (at protein level).

Background

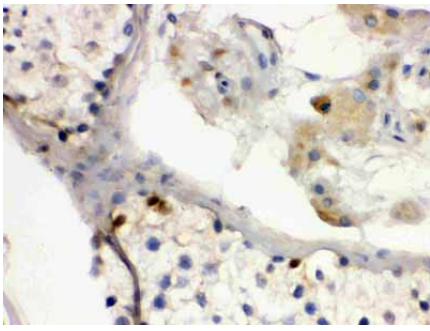
Doublesex and mab-3 related transcription factor 1, also known as DMRT1, is a protein which in humans is encoded by the DMRT1 gene. This gene is found in a cluster with two other members of the gene family, having in common a zinc finger-like DNA-binding motif (DM domain). The DM domain is an ancient, conserved component of the vertebrate sex-determining pathway that is also a key regulator of male development in flies and nematodes. This gene exhibits a gonad-specific and sexually dimorphic expression pattern. Defective testicular development and XY feminization occur when this gene is hemizygous.

Images



Anti- DMRT1 antibody, ABO12761, Western blottingAll lanes: Anti DMRT1 (ABO12761) at 0.5ug/mlLane 1: Rat Testis Tissue Lysate at 50ugLane 2: Mouse Testis Tissue Lysate at 50ugLane 3: Rat Brain Tissue Lysate at 50ugLane 4: Mouse Brain Tissue Lysate at 50ugLane 5: U87 Whole Cell Lysate at 40ugPredicted bind size: 39KDObserved bind size: 39KD

Anti- DMRT1 antibody, ABO12761,IHC(P)IHC(P): Human Testis Tissue



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.