

**Anti-DMRT1 Antibody**  
Catalog # ABO12761**Specification****Anti-DMRT1 Antibody - Product Information**

Application	<b>WB, IHC</b>
Primary Accession	<a href="#">O9Y5R6</a>
Host	<b>Rabbit</b>
Reactivity	<b>Human, Mouse, Rat</b>
Clonality	<b>Polyclonal</b>
Format	<b>Lyophilized</b>

**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.<br>

**Reconstitution**

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

**Anti-DMRT1 Antibody - 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 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat<br>Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat<br>

**Subcellular Localization**

Nucleus .

**Tissue Specificity**

Testis-specific. Expressed in prostate cancer (at protein level). .

**Protein Name**

Doublesex- and mab-3-related transcription factor 1

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>N.

**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.

## Anti-DMRT1 Antibody - 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:000255|PROSITE-ProRule:PRU00070}.

### Tissue Location

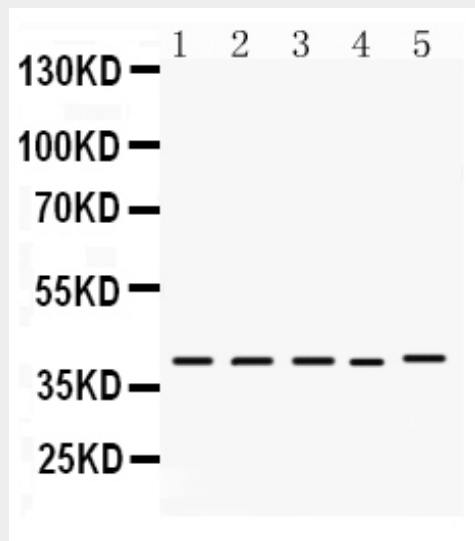
Testis-specific. Expressed in prostate cancer (at protein level).

## Anti-DMRT1 Antibody - Protocols

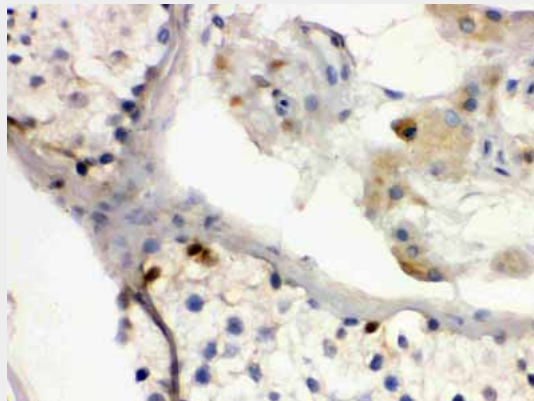
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Anti-DMRT1 Antibody - Images



Anti- DMRT1 antibody, ABO12761, Western blotting  
 All lanes: Anti DMRT1 (ABO12761) at 0.5ug/ml  
 Lane 1: Rat Testis Tissue Lysate at 50ug  
 Lane 2: Mouse Testis Tissue Lysate at 50ug  
 Lane 3: Rat Brain Tissue Lysate at 50ug  
 Lane 4: Mouse Brain Tissue Lysate at 50ug  
 Lane 5: U87 Whole Cell Lysate at 40ug  
 Predicted bind size: 39KD  
 Observed bind size: 39KD



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

### Anti-DMRT1 Antibody - 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.