

# **DMRT1 Antibody (C-term)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP19143b

## **Specification**

# **DMRT1** Antibody (C-term) - Product Information

**Application** WB,E **Primary Accession 09Y5R6** Other Accession NP 068770.2 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 39473 Antigen Region 296-322

## **DMRT1** Antibody (C-term) - Additional Information

#### **Gene ID 1761**

### **Other Names**

Doublesex- and mab-3-related transcription factor 1, DM domain expressed in testis protein 1, DMRT1, DMT1

## Target/Specificity

This DMRT1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 296-322 amino acids from the C-terminal region of human DMRT1.

## **Dilution**

WB~~1:1000

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**

DMRT1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# **DMRT1** Antibody (C-term) - 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**

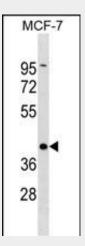
Testis-specific. Expressed in prostate cancer (at protein level).

### **DMRT1 Antibody (C-term) - Protocols**

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

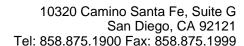
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# DMRT1 Antibody (C-term) - Images



DMRT1 Antibody (C-term) (Cat. #AP19143b) western blot analysis in MCF-7 cell line lysates (35ug/lane). This demonstrates the DMRT1 antibody detected the DMRT1 protein (arrow).

## DMRT1 Antibody (C-term) - Background





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.

# **DMRT1 Antibody (C-term) - References**

Kang, J.U., et al. Int. J. Oncol. 37(2):327-335(2010)
Turnbull, C., et al. Nat. Genet. 42(7):604-607(2010)
Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010):
Krentz, A.D., et al. Proc. Natl. Acad. Sci. U.S.A. 106(52):22323-22328(2009)
Cheng, H.H., et al. Cell Res. 16(4):389-393(2006)