

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

Synthetic peptide Catalog # BP19143b

#### **Specification**

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

Primary Accession

**09Y5R6** 

# DMRT1 Antibody (C-term) Blocking Peptide - Additional Information

**Gene ID 1761** 

#### **Other Names**

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

# **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

### DMRT1 Antibody (C-term) Blocking Peptide - 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) Blocking Peptide - Protocols

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

#### Blocking Peptides

**DMRT1 Antibody (C-term) Blocking Peptide - Images** 

# DMRT1 Antibody (C-term) Blocking Peptide - Background

This gene is found in a cluster with two other members ofthe gene family, having in common a zinc finger-like DNA-bindingmotif (DM domain). The DM domain is an ancient, conserved component of the vertebrate sex-determining pathway that is also a keyregulator of male development in flies and nematodes. This geneexhibits a gonad-specific and sexually dimorphic expression pattern. Defective testicular development and XY feminization occurwhen this gene is hemizygous.

### DMRT1 Antibody (C-term) Blocking Peptide - 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)