

DMRT1 antibody - N-terminal region

Rabbit Polyclonal Antibody Catalog # AI16234

Product Information

Application WB
Primary Accession Q9Y5R6

Other Accession <u>NM_021951</u>, <u>NP_068770</u>

Reactivity PredictedHuman, Rabbit, Pig, Dog, Bovine
Human, Rabbit, Pig, Dog, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 39473

Additional Information

Gene ID 1761

Alias Symbol DMT1

Other Names Doublesex- and mab-3-related transcription factor 1, DM domain expressed in

testis protein 1, DMRT1, DMT1

Format Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium

azide and 2% sucrose.

Reconstitution & Storage Add 50 ul of distilled water. Final anti-DMRT1 antibody concentration is 1

mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at

20°C. Avoid repeat freeze-thaw cycles.

Precautions DMRT1 antibody - N-terminal region is for research use only and not for use

in diagnostic or therapeutic procedures.

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).

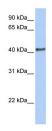
Background

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).

References

Raymond C.S.,et al.Hum. Mol. Genet. 8:989-996(1999). Calvari V.,et al.Genomics 65:203-212(2000). Cheng H.H.,et al.Cell Res. 16:389-393(2006). Ota T.,et al.Nat. Genet. 36:40-45(2004). Humphray S.J.,et al.Nature 429:369-374(2004).

Images



WB Suggested Anti-DMRT1 Antibody Titration: 0.2-1 μg/ml Positive Control: Human brain

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