

DMRT1 Rabbit pAb

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Catalog # AP54441

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9Y5R6
Reactivity	Human, Rat
Predicted	Mouse, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	39473
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human DMRT1
Epitope Specificity	51-100/373
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Nucleus.
SIMILARITY	Belongs to the DMRT family. Contains 1 DM DNA-binding domain.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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. [provided by RefSeq, Jul 2008]

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	Testis specific.
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

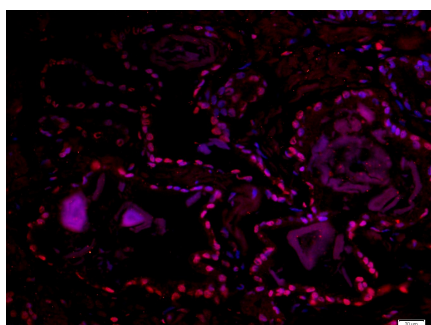
Protein Information

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

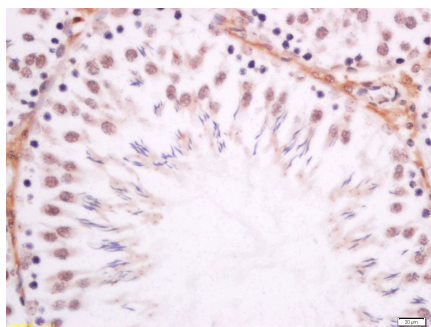
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Images



Tissue/cell: human prostate tissue;4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-DMRT1 Polyclonal Antibody, Unconjugated(AP54441) 1:500, overnight at 4°C; The secondary antibody was Goat Anti-Rabbit IgG, Cy3 conjugated(AP54441-Cy3)used at 1:200 dilution for 40 minutes at 37°C. DAPI(5ug/ml,blue,C-0033) was used to stain the cell nuclei

Tissue/cell: rat testis tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-DMRT1 Polyclonal Antibody, Unconjugated(AP54441) 1:200, overnight at 4°C, followed



by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

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