



Rabbit Anti-Dmrta1 antibody

SL11276R

Product Name:	Dmrta1
Chinese Name:	性发育转录因子蛋白DMO抗体
Alias:	DMO; DMRT-like family A1; Dmrt4; DMRTA_HUMAN; Dmrta1; Doublesex- and mab-3-related transcription factor 4; Doublesex- and mab-3-related transcription factor A1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Horse,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	41(h)/53(m)kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Dmrta1:51-100/373
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
PubMed:	PubMed
Product Detail:	DMRTA1 is a 504 amino acid protein that localizes to the nucleus and contains one DM DNA-binding domain. Expressed in prostate, liver, pancreas and kidney and present at lower levels in ovary and testis, DMRTA1 is thought to be involved in sexual developmental processes during maturation. The gene encoding DMRTA1 maps to human chromosome 9, which houses over 900 genes and comprises nearly 4% of the

human genome. Hereditary hemorrhagic telangiectasia, which is characterized by harmful vascular defects, and Familial dysautonomia, are both associated with chromosome 9. Notably, chromosome 9 encompasses the largest interferon family gene cluster.

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).

Subcellular Location:

Nucleus.

Tissue Specificity:

Testis-specific.

DISEASE:

Defects in DMRT1 may be a cause of testicular germ cell tumor (TGCT) [MIM:273300]. A common solid malignancy in males. Germ cell tumors of the testis constitute 95% of all testicular neoplasms.

Defects in DMRT1 may be a cause of 46,XY sex reversal type 4 (SRXY4) [MIM:54230]. A condition characterized by male-to-female sex reversal in the presence of a normal 46,XY karyotype. Patients display complete or partial gonadal dysgenesis and a chromosome 9p deletion.

Similarity:

Belongs to the DMRT family.
Contains 1 DM DNA-binding domain.

SWISS:

Q5VZB9

Gene ID:

63951

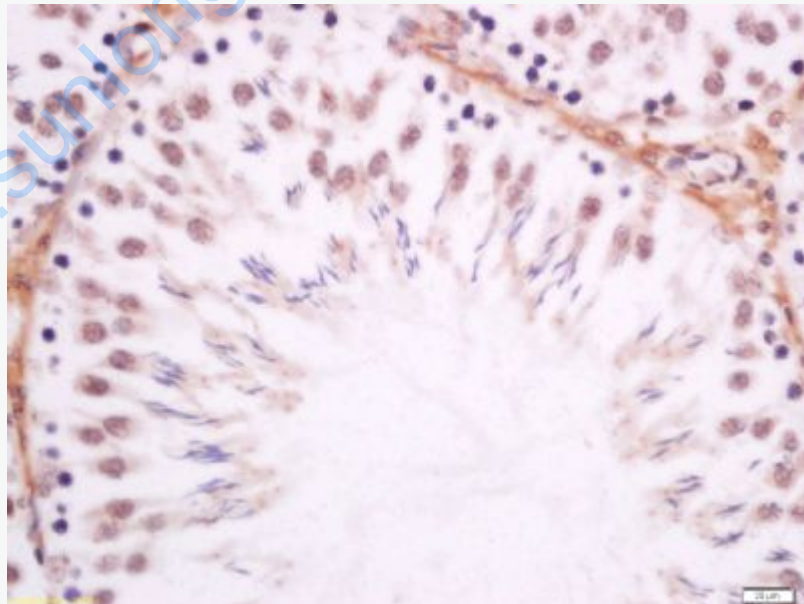
Database links:

[Entrez Gene: 63951](#)Human
[Entrez Gene: 242523](#)Mouse
[Entrez Gene: 313352](#)Rat
[Oimim: 614803](#)Human
[SwissProt: Q5VZB9](#)Human
[SwissProt: A2AL09](#)Mouse
[SwissProt: Q8CFG4](#)Mouse
[Unigene: 371976](#)Human
[Unigene: 130167](#)Mouse
[Unigene: 43064](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

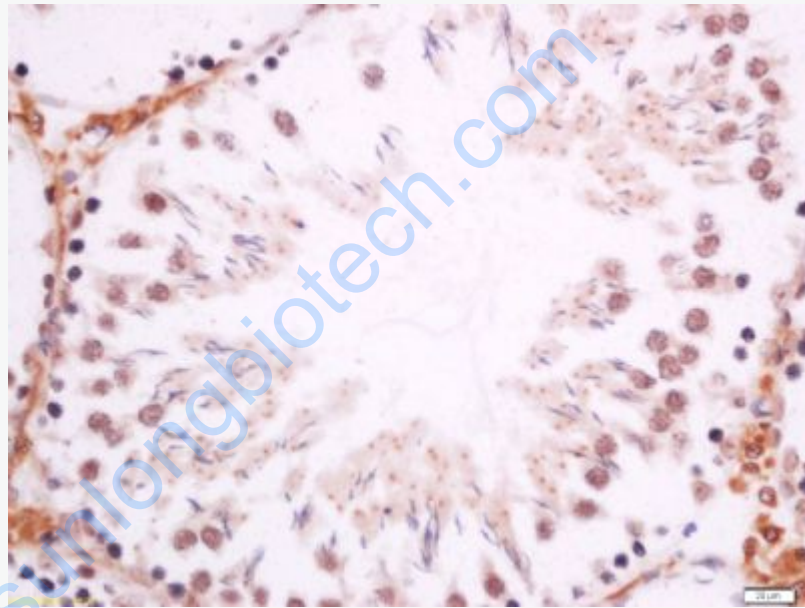
Picture:



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;

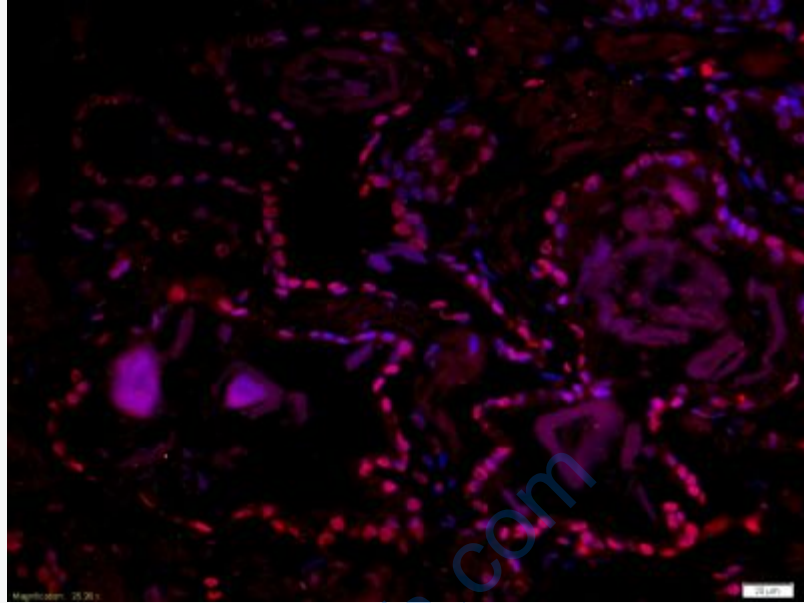
Incubation: Anti-Dmrta1 Polyclonal Antibody, Unconjugated(SL11276R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



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-Dmrta1 Polyclonal Antibody, Unconjugated(SL11276R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



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-Dmrta1 Polyclonal Antibody, Unconjugated(SL11276R) 1:500, overnight at 4°C; The secondary antibody was Goat Anti-Rabbit IgG, Cy3 conjugated(SL11276R)used at 1:200 dilution for 40 minutes at 37°C.

DAPI(5ug/ml,blue,C-0033) was used to stain the cell nuclei