

Anti-DMRT1 Antibody

Catalog Number: RP1083

About DMRT1

Doublesex and mab-3 related transcription factor 1, also known as DMRT1, is a protein which in humans is encoded by the DMRT1 gene. 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.

Overview

Product Name	Anti-DMRT1 Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-DMRT1 Antibody catalog # RP1083. Tested in IHC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	Q9Y5R6

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human DMRT1, different from the related mouse sequence by one amino acid.
Predicted Reactive Species	Hamster
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.

Purification	Immunogen affinity purified.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Mouse, Rat, By Heat</p> <p>Western blot, 0.1-0.5ug/ml, Mouse, Rat, Human</p>

Anti-DMRT1 Antibody (RP1083) Images

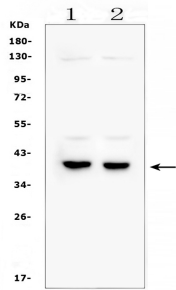


Figure 1. Western blot analysis of DMRT1 using anti-DMRT1 antibody (RP1083).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: rat testis tissue lysates,

Lane 2: mouse testis tissue lysates.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-DMRT1 antigen affinity purified polyclonal antibody (Catalog # RP1083) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for DMRT1 at approximately 39KD. The expected band size for DMRT1 is at 39KD.

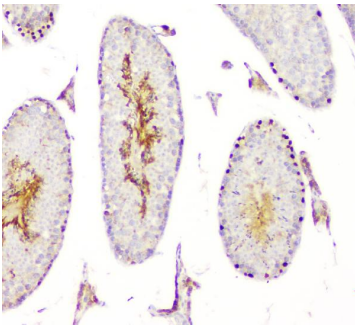


Figure 2. IHC analysis of DMRT1 using anti-DMRT1 antibody (RP1083).

DMRT1 was detected in paraffin-embedded section of mouse testis tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-DMRT1 Antibody (RP1083) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

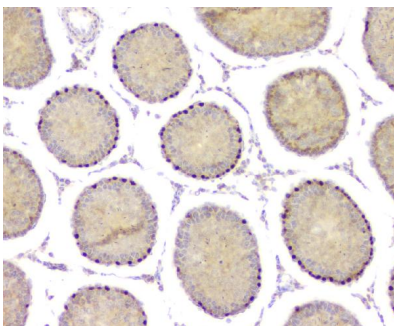
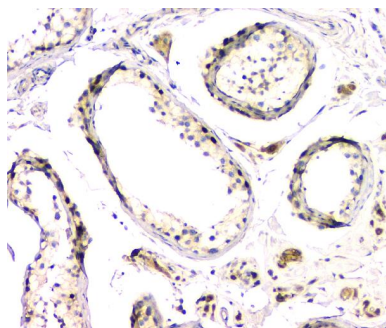


Figure 3. IHC analysis of DMRT1 using anti-DMRT1 antibody (RP1083).

DMRT1 was detected in paraffin-embedded section of rat testis tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-DMRT1 Antibody (RP1083) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

Figure 4. IHC analysis of DMRT1 using anti-DMRT1 antibody (RP1083).



DMRT1 was detected in paraffin-embedded section of human testis tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-DMRT1 Antibody (RP1083) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

1 Publications Citing This Product

1. PubMed ID: 32670009, Tai S,Zheng Q,Zhai S,Cai T,Xu L,Yang L,Jiao L,Zhang C.Alpha-Lipoic Acid Mediates Clearance of Iron Accumulation by Regulating Iron Metabolism in a Parkinson's Disease Model Induced by 6-OHDA.Front Neurosci. 2020 Jun 25;14:612.doi:10.3389/fnins.2020.

Visit [bosterbio.com/anti-dmrt1-antibody-rp1083-boster.html](https://www.bosterbio.com/anti-dmrt1-antibody-rp1083-boster.html) to see all 1 publications.

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