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antibody and ELISA experts

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Anti-MTA1 Antibody

Catalog Number: PA1483

About MTA1

Metastasis-associated protein MTA1 is a protein that in humans is encoded by the MTA1 gene. This gene encodes a protein that was identified in a screen for genes expressed in metastatic cells, specifically, mammary adenocarcinoma cell lines. Expression of this gene has been correlated with the metastatic potential of at least two types of carcinomas although it is also expressed in many normal tissues.By fluorescence in situ hybridization, mapped the MTA1gene to chromosome 14q32.3. MTA1 is a component of the chromatin remodeling complex that influences gene transcription by modulating target gene chromatin. MTA1 is widely upregulated in many carcinomas.

Overview

Product Name	Anti-MTA1 Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-MTA1 Antibody catalog # PA1483. Tested in IHC, IHC-F, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	IHC, IHC-F, WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 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	Q13330

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human MTA1, identical to the related mouse and rat sequences.
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) and IHC(F).
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.

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

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Anti-MTA1 Antibody (PA1483) Images

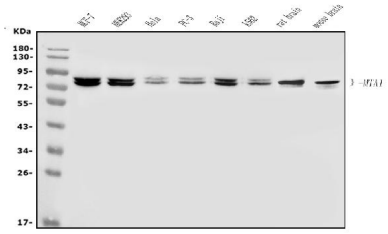
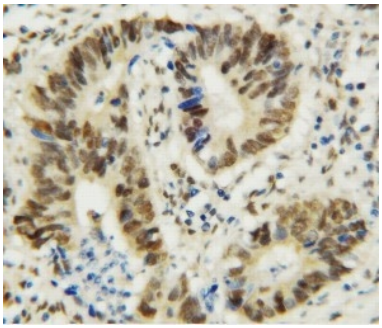


Figure 1. Western blot analysis of MTA1 using anti-MTA1 antibody (PA1483).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.
Lane 1: human MCF-7 whole cell lysates,
Lane 2: human HEK293 whole cell lysates,
Lane 3: human HELA whole cell lysates,
Lane 4: human PC-3 whole cell lysates,
Lane 5: human Raji whole cell lysates,
Lane 6: human K562 whole cell lysates,
Lane 7: rat brain tissue lysates,
Lane 8: mouse brain 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-MTA1 antigen affinity purified polyclonal antibody (Catalog # PA1483) 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 1:5000 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 MTA1 at approximately 80KD. The expected band size for MTA1 is at 80KD.



Anti-MTA1 antibody, PA1483, IHC(P)
IHC(P): Human Rectal Cancer Tissue

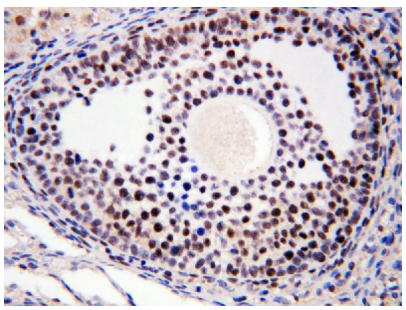


Figure 4. IHC analysis of MTA1 using anti-MTA1 antibody (PA1483).
MTA1 was detected in paraffin-embedded section of rat ovary tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-MTA1Antibody (PA1483) 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 Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

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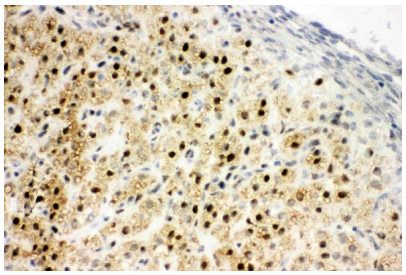

Anti-MTA1 antibody, PA1483, IHC(F)
IHC(F): Rat Ovary Tissue

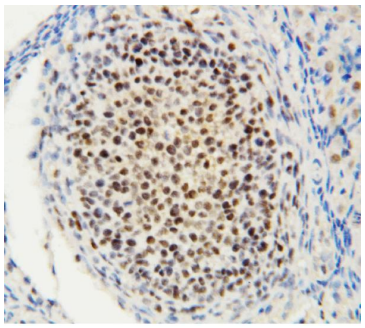

Figure 5. IHC analysis of MTA1 using anti-MTA1 antibody (PA1483).
MTA1 was detected in paraffin-embedded section of rat ovary tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-MTA1 Antibody (PA1483) 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 Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

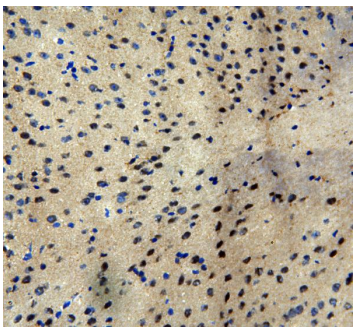

Figure 6. IHC analysis of MTA1 using anti-MTA1 antibody (PA1483).
MTA1 was detected in frozen section of mouse brain tissues. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-MTA1 Antibody (PA1483) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

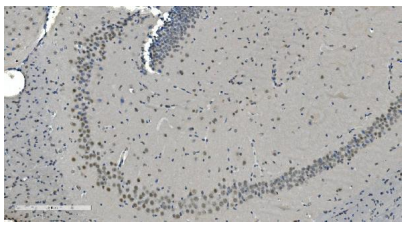

Figure 7. IHC analysis of MTA1 using anti-MTA1 antibody (PA1483).
MTA1 was detected in paraffin-embedded section of mouse brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-MTA1 Antibody (PA1483) 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 Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

Figure 8. IHC analysis of MTA1 using anti-MTA1 antibody (PA1483).
MTA1 was detected in paraffin-embedded section of human ovarian cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-MTA1 Antibody (PA1483) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and

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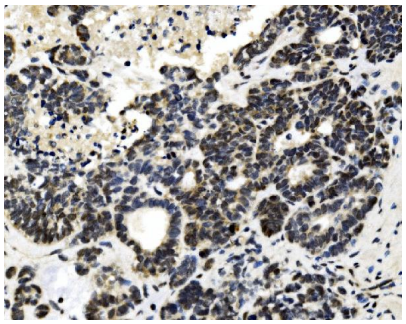

incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

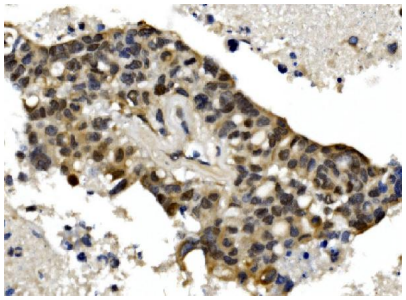

Figure 9. IHC analysis of MTA1 using anti-MTA1 antibody (PA1483).
MTA1 was detected in paraffin-embedded section of human pancrease cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-MTA1 Antibody (PA1483) 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 Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.