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Anti-CRM1 Picoband Antibody
Catalog # ABO12651

Specification

Anti-CRM1 Picoband Antibody - Product Information

Application	**WB, IHC-P, IHC-F**
Primary Accession	O14980
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Exportin-1(XPO1) detection. Tested with WB, IHC-P, IHC-F in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-CRM1 Picoband Antibody - Additional Information

Gene ID 7514

Other Names
Exportin-1, Exp1, Chromosome region maintenance 1 protein homolog, XPO1, CRM1

Calculated MW
123386 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, By Heat
Immunohistochemistry(Frozen Section), 0.5-1 µg/ml

Western blot, 0.1-0.5 µg/ml

Subcellular Localization
Cytoplasm. Nucleus, nucleoplasm. Nucleus, Cajal body. Nucleus, nucleolus. Located in the nucleoplasm, Cajal bodies and nucleoli. Shuttles between the nucleus/nucleolus and the cytoplasm.

Tissue Specificity
Expressed in heart, brain, placenta, lung, liver, skeletal muscle, pancreas, spleen, thymus, prostate, testis, ovary, small intestine, colon and peripheral blood leukocytes. Not expressed in the kidney. .

Protein Name
Exportin-1

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
E.coli-derived human CRM1 recombinant protein (Position: N966-D1071). Human CRM1 shares 93.4% and 91.5% amino acid (aa) sequence identity with mouse and rat CRM1, respectively.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Anti-CRM1 Picoband Antibody - Protein Information

Name XPO1

Synonyms CRM1

Function
Mediates the nuclear export of cellular proteins (cargos) bearing a leucine-rich nuclear export signal (NES) and of RNAs. In the nucleus, in association with RANBP3, binds cooperatively to the NES on its target protein and to the GTPase RAN in its active GTP-bound form (Ran-GTP). Docking of this complex to the nuclear pore complex (NPC) is mediated through binding to nucleoporins. Upon transit of a nuclear export complex into the cytoplasm, disassembling of the complex and hydrolysis of Ran-GTP to Ran-GDP (induced by RANBP1 and RANGAP1, respectively) cause release of the cargo from the export receptor. The directionality of nuclear export is thought to be conferred by an asymmetric distribution of the GTP- and GDP-bound forms of Ran between the cytoplasm and nucleus. Involved in U3 snoRNA transport from Cajal bodies to nucleoli. Binds to late precursor U3 snoRNA bearing a TMG cap.

Cellular Location
Cytoplasm. Nucleus, nucleoplasm. Nucleus, Cajal body. Nucleus, nucleolus. Note=Located in the nucleoplasm, Cajal bodies and nucleoli. Shuttles between the nucleus/nucleolus and the cytoplasm

Tissue Location
Expressed in heart, brain, placenta, lung, liver, skeletal muscle, pancreas, spleen, thymus, prostate, testis, ovary, small intestine, colon and peripheral blood leukocytes. Not expressed in the kidney.

Anti-CRM1 Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety

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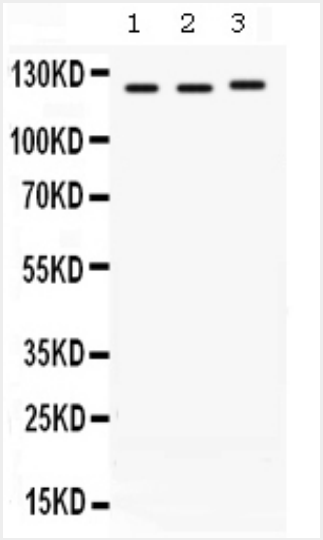
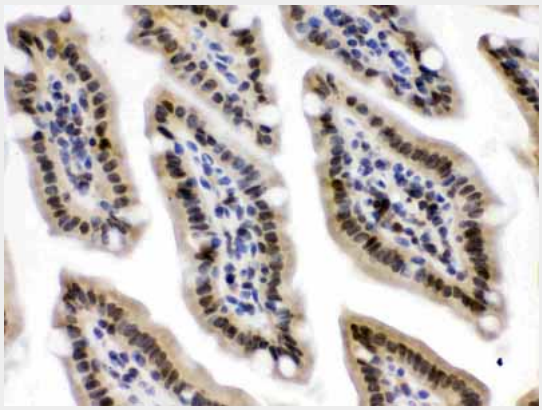
- Cell Culture

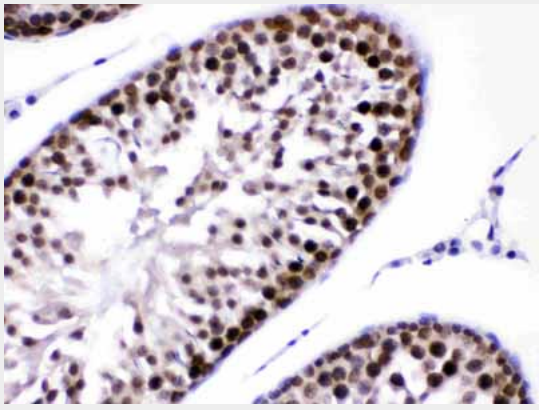
Anti-CRM1 Picoband Antibody - Images



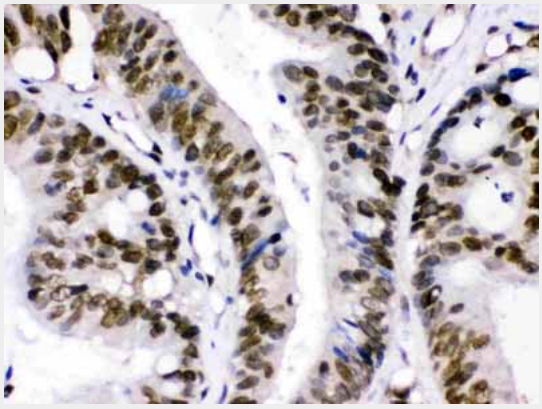
Western blot analysis of CRM1 expression in rat cardiac muscle extract (lane 1), mouse brain extract (lane 2) and A549 whole cell lysates (lane 3). CRM1 at 123KD was detected using rabbit anti-CRM1 Antigen Affinity purified polyclonal antibody (Catalog # ABO12651) at 0.5 ??g/mL. The blot was developed using chemiluminescence (ECL) method .



CRM1 was detected in paraffin-embedded sections of mouse intestine tissues using rabbit anti-CRM1 Antigen Affinity purified polyclonal antibody (Catalog # ABO12651) at 1 Î¼g/mL. The immunohistochemical section was developed using SABC method .



CRM1 was detected in paraffin-embedded sections of rat testis tissues using rabbit anti- CRM1 Antigen Affinity purified polyclonal antibody (Catalog # ABO12651) at 1 Î¼g/mL. The immunohistochemical section was developed using SABC method .



CRM1 was detected in paraffin-embedded sections of human intestinal cancer tissues using rabbit anti- CRM1 Antigen Affinity purified polyclonal antibody (Catalog # ABO12651) at 1 Î¼g/mL. The immunohistochemical section was developed using SABC method (Catalog # SA2002).

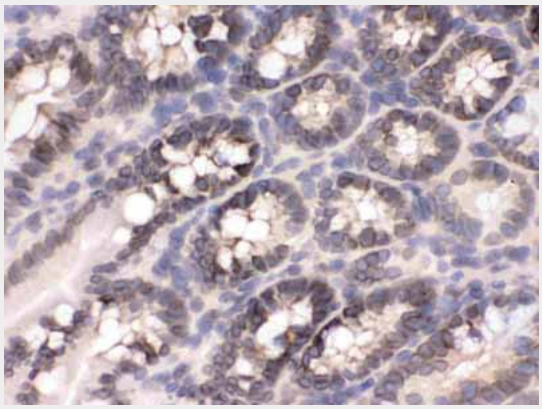


Figure 5. IHC analysis of CRM1 using anti-CRM1 antibody (ABO12651).CRM1 was detected in frozen section of mouse intestine tissue . Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1Î¼g/ml rabbit anti-CRM1 Antibody (ABO12651) overnight at 4Â°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37Â°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

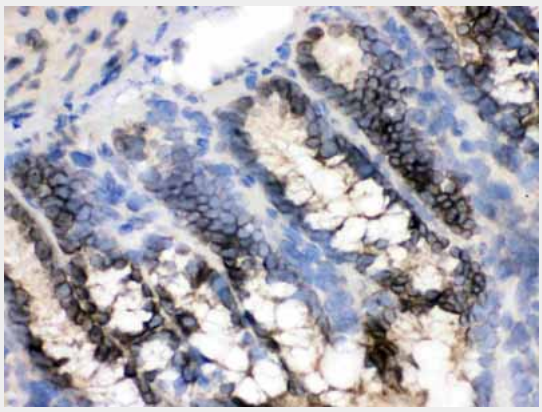


Figure 6. IHC analysis of CRM1 using anti-CRM1 antibody (ABO12651).CRM1 was detected in frozen section of rat intestine tissue . Heat mediated antigen retrieval was performed in citrate

buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1Î¼g/ml rabbit anti-CRM1 Antibody (ABO12651) overnight at 4Â°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37Â°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

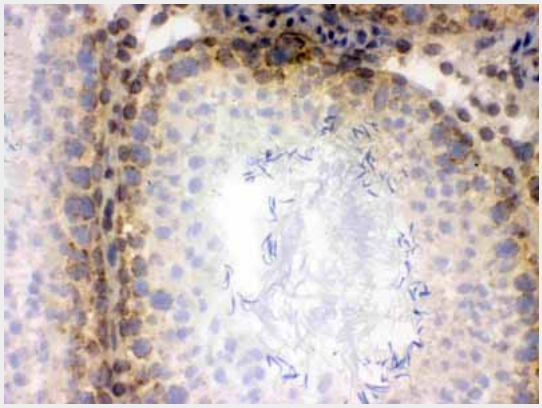


Figure 7. IHC analysis of CRM1 using anti-CRM1 antibody (ABO12651).CRM1 was detected in frozen section of rat testis tissue . Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1Î¼g/ml rabbit anti-CRM1 Antibody (ABO12651) overnight at 4Â°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37Â°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

Anti-CRM1 Picoband Antibody - Background

Exportin 1 (XPO1), also known as chromosomal maintenance 1 (CRM1), is an eukaryotic protein that mapped to human chromosome 2p16 by fluorescence in situ hybridization. This protein mediates leucine-rich nuclear export signal (NES)-dependent protein transport. It specifically inhibits the nuclear export of Rev and U snRNAs. Additionally, this protein is involved in the control of several cellular processes by controlling the localization of cyclin B, MPAK, and MAPKAP kinase 2. It also regulates NFAT and AP-1.