

Rabbit MECR Polyclonal Antibody | anti-MECR antibody

Anti-MECR Antibody Picoband

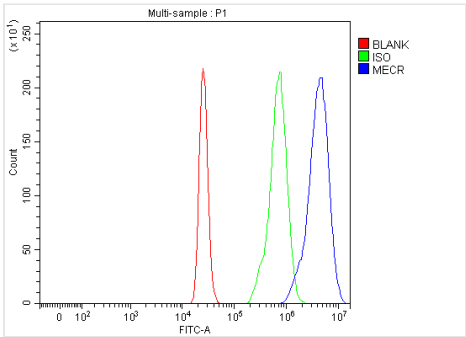
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127506	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

MECR; Polyclonal Antibody; Anti-MECR Antibody Picoband; ZFP42 zinc finger protein; Zinc finger protein 42 homolog; Zfp-42; Reduced expression protein 1; REX-1; hREX-1; Zinc finger protein 754; ZFP42; REX1; ZNF754; anti-MECR antibody

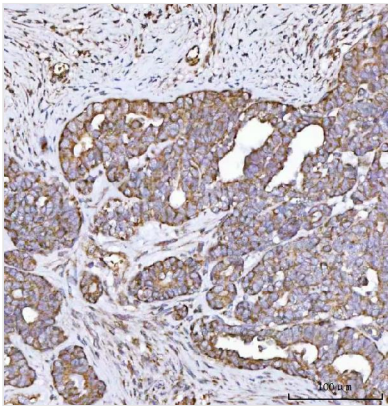
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Expressed in kidney, epidermal keratinocytes, prostate epithelial cells, bronchial and small airway lung epithelial cells (at protein level).Expressed in malignant kidney and several carcinoma cell lines (at protein level).Expressed in embryonic stem cells, kidney, epidermal keratinocytes, prostate epithelial cells, bronchial and small airway lung epithelial cells.Expressed in embryonal carcinomas, seminomas, malignant kidney and several carcinoma cell lines.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Applicable Applications for anti-MECR antibody	ELISA, FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E coli-derived human MECR recombinant protein (Position: E39-A359).
Subcellular Localization	Nucleus
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross-reactivity with other proteins.
Protein Function	Involved in the reprogramming of X-chromosome inactivation during the acquisition of pluripotency. Required for efficient elongation of TSIX, a non-coding RNA antisense to XIST. Binds DXPas34 enhancer within the TSIX promoter. Involved in ES cell self-renewal.
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.



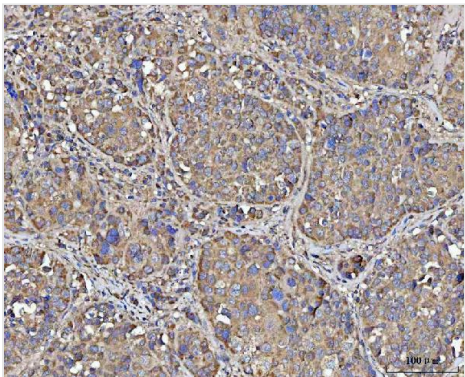
FCM/FACS (Flow Cytometry)

Figure 5. Flow Cytometry analysis of 293T cells using anti-MECR antibody (AAA127506). Overlay histogram showing 293T cells stained with AAA127506 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-MECR Antibody (AAA127506, 1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



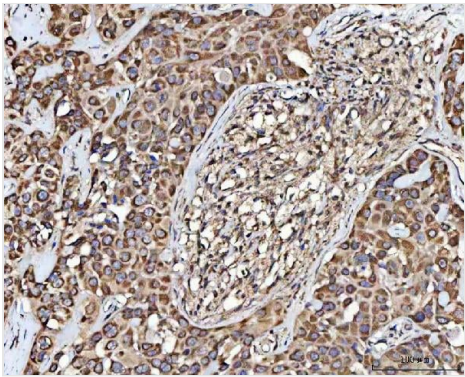
IHC (Immunohistochemistry)

Figure 3. IHC analysis of MECR using anti-MECR antibody (AAA127506).MECR was detected in a paraffin-embedded section of human ovarian cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-MECR Antibody (AAA127506) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



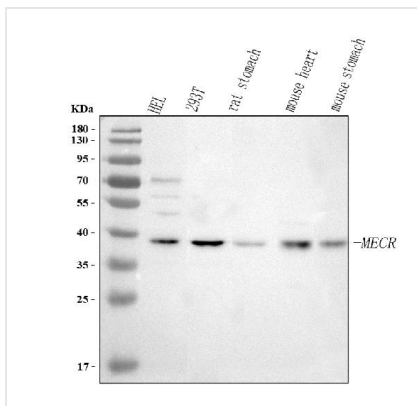
IHC (Immunohistochemistry)

Figure 4. IHC analysis of MECR using anti-MECR antibody (AAA127506).MECR was detected in a paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-MECR Antibody (AAA127506) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of MECR using anti-MECR antibody (AAA127506).MECR was detected in a paraffin-embedded section of human parotid acinar cell carcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-MECR Antibody (AAA127506) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of MECR using anti-MECR antibody (AAA127506). 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 30 ug of sample under reducing conditions. Lane 1: human HEL whole cell lysates, Lane 2: human 293T whole cell lysates, Lane 3: rat stomach tissue lysates, Lane 4: rat heart tissue lysates, Lane 5: rat stomach tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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-MECR antigen affinity purified polyclonal antibody (#AAA127506) at 0.5ug/mL overnight at 4 degree 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 with Tanon 5200 system. A specific band was detected for MECR at approximately 38 kDa. The expected band size for MECR is at 38 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-MECR antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Product Categories/Family for anti-MECR antibody	Primary Antibodies ; Immune System Diseases ; Immunology ; Protein Trafficking ; Signal Transduction ; Signaling Pathway
References	1. Heimer, G., Keratar, J. M., Riley, L. G., Balasubramaniam, S., Eyal, E., Pietikainen, L. P., Hiltunen, J. K., Marek-Yagel, D., Hamada, J., Gregory, A., Rogers, C., Hogarth, P., and 24 others. MECR mutations cause childhood-onset dystonia and optic atrophy, a mitochondrial fatty acid synthesis disorder. <i>Am. J. Hum. Genet.</i> 99: 1229-1244, 2016. 2. Liu, Z., Shimura, M., Zhang, L., Zhang, W., Wang, J., Ogawa-Tominaga, M., Wang, J., Wang, X., Lv, J., Shi, W., Zhang, V. W., Murayama, K., Fang, F. Whole exome sequencing identifies a novel homozygous MECR mutation in a Chinese patient with childhood-onset dystonia and basal ganglia abnormalities, without optic atrophy. <i>Mitochondrion</i> 57: 222-229, 2021. 3. Miinalainen, I. J., Chen, Z.-J., Torkko, J. M., Pirila, P. L., Sormunen, R. T., Bergmann, U., Qin, Y.-M., Hiltunen, J. K. Characterization of 2-enoyl thioester reductase from mammals: an ortholog of Ybr026p/Mrf1p of the yeast mitochondrial fatty acid synthesis type II. <i>J. Biol. Chem.</i> 278: 20154-20161, 2003.

NCBI AND UNIPROT INFORMATION

NCBI GI #	544346114
NCBI GeneID	51102
NCBI Accession #	NP_001019903.2
NCBI GenBank Nucleotide #	NM_001024732.2
UniProt Accession #	Q9BV79; Q5SYU0; Q5SYU1; Q5SYU2; Q6IBU9; Q9Y373; B3KT72
Molecular Weight	32,228 Da
NCBI Official Full Name	trans-2-enoyl-CoA reductase, mitochondrial isoform b

NCBI Official Synonym Full Names	mitochondrial trans-2-enoyl-CoA reductase
NCBI Official Symbol	MECR
NCBI Official Synonym Symbols	NRBF1; CGI-63; FASN2B
NCBI Protein Information	trans-2-enoyl-CoA reductase, mitochondrial; homolog of yeast 2-enoyl thioester reductase; mitochondrial 2-enoyl thioester reductase; nuclear receptor binding factor 1
UniProt Protein Name	Trans-2-enoyl-CoA reductase, mitochondrial
UniProt Gene Name	MECR
UniProt Synonym Gene Names	NBRF1; HsNr1b-1; NRBF-1
UniProt Entry Name	MECR_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/polyclonal/mecr-antibody-flow-cytometry-immunohistochemistry-western-blot-elisa/127506>