

Anti-MICB Picoband Antibody

Catalog # ABO12299

Specification

Anti-MICB Picoband Antibody - Product Information

ApplicationWBPrimary AccessionQ29980HostRabbitReactivityHuman, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for MHC class I polypeptide-related

Rabbit IgG polyclonal antibody for MHC class I polypeptide-related sequence B(MICB) detection. Tested with WB in Human;Rat.

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

Anti-MICB Picoband Antibody - Additional Information

Gene ID 4277

Other Names MHC class I polypeptide-related sequence B, MIC-B, MICB {ECO:0000312|EMBL:CAA62823.1}

Calculated MW 42646 MW KDa

Application Details Western blot, 0.1-0.5 μg/ml, Human, Rat

Subcellular Localization Cell membrane ; Single-pass type I membrane protein . Binding to human cytomegalovirus glycoprotein UL16 causes sequestration in the endoplasmic reticulum. .

Tissue Specificity

Widely expressed with the exception of the central nervous system where it is absent. Expressed in many, but not all, epithelial tumors of lung, breast, kidney, ovary, prostate and colon. In hepatocellular carcinomas, expressed in tumor cells but not in surrounding non-cancerous tissue.

Protein Name MHC class I polypeptide-related sequence B

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

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human MICB (23-48aa AEPHSLRYNLMVLSQDESVQSGFLAE).



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.

Sequence Similarities Belongs to the MHC class I family. MIC subfamily.

Anti-MICB Picoband Antibody - Protein Information

Name MICB {ECO:0000312|EMBL:CAA62823.1}

Function

Widely expressed membrane-bound protein which acts as a ligand to stimulate an activating receptor KLRK1/NKG2D, expressed on the surface of essentially all human natural killer (NK), gammadelta T and CD8+ alphabeta T-cells (PubMed:11491531, PubMed:11777960). Up-regulated in stressed conditions, such as viral and bacterial infections or DNA damage response, serves as signal of cellular stress, and engagement of KLRK1/NKG2D by MICA triggers NK-cells resulting in a range of immune effector functions, such as cytotoxicity and cytokine production.

Cellular Location

Cell membrane {ECO:0000250|UniProtKB:Q29983}; Single-pass type I membrane protein {ECO:0000250|UniProtKB:Q29983} Note=Binding to human cytomegalovirus glycoprotein UL16 causes sequestration in the endoplasmic reticulum {ECO:0000250|UniProtKB:Q29983, ECO:0000269|PubMed:12782710}

Tissue Location

Widely expressed with the exception of the central nervous system where it is absent. Expressed in many, but not all, epithelial tumors of lung, breast, kidney, ovary, prostate and colon In hepatocellular carcinomas, expressed in tumor cells but not in surrounding non-cancerous tissue.

Anti-MICB Picoband Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- <u>Cell Culture</u>

Anti-MICB Picoband Antibody - Images





Anti- MICB Picoband antibody, ABO12299, Western blottingAll lanes: Anti MICB (ABO12299) at 0.5ug/mlLane 1: Rat Testis Tissue Lysate at 50ugLane 2: SW620 Whole Cell Lysate at 40ugLane 3: A549 Whole Cell Lysate at 40ugLane 4: 22RV1 Whole Cell Lysate at 40ugPredicted bind size: 43KDObserved bind size: 43KD

Anti-MICB Picoband Antibody - Background

MHC class I polypeptide-related sequence B is a protein that in humans is encoded by the MICB gene. This gene encodes a heavily glycosylated protein which is a ligand for the NKG2D type II receptor. Binding of the ligand activates the cytolytic response of natural killer (NK) cells, CD8 alphabeta T cells, and gammadelta T cells which express the receptor. This protein is stress-induced and is similar to MHC class I molecules; however, it does not associate with beta-2-microglobulin or bind peptides. Alternative splicing results in multiple transcript variants.