

Anti-MICB Picoband Antibody

Catalog # ABO12299

Product Information

Application	WB
Primary Accession	Q29980
Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	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.

Additional Information

Gene ID	4277
Other Names	MHC class I polypeptide-related sequence B, MIC-B, MICB {ECO:0000312 EMBL:CAA62823.1}
Calculated MW	42575
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. .
Source	Eukaryota
Protein Name	MHC class I polypeptide-related sequence B
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
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.

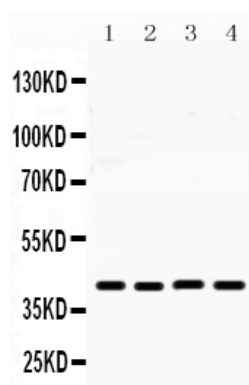
Protein Information

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.

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.

Images



Anti- MICB Picoband antibody, ABO12299, Western blotting
 All lanes: Anti MICB (ABO12299) at 0.5ug/ml
 Lane 1: Rat Testis Tissue Lysate at 50ug
 Lane 2: SW620 Whole Cell Lysate at 40ug
 Lane 3: A549 Whole Cell Lysate at 40ug
 Lane 4: 22RV1 Whole Cell Lysate at 40ug
 Predicted bind size: 43KD
 Observed bind size: 43KD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.