

Anti-MICA Picoband Antibody

Catalog # ABO12298

Specification

Anti-MICA Picoband Antibody - Product Information

Application WB
Primary Accession Q29983
Host Reactivity Human
Clonality Polyclonal
Format Lyophilized

Description

Rabbit IgG polyclonal antibody for MHC class I polypeptide-related sequence A(MICA) detection. Tested with WB in Human.

Reconstitution

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

Anti-MICA Picoband Antibody - Additional Information

Gene ID 100507436

Other Names

MHC class I polypeptide-related sequence A, MIC-A, MICA {ECO:0000312|EMBL:CAI41907.1}

Calculated MW 42915 MW KDa

Application Details

Western blot, 0.1-0.5 μg/ml, Human

Subcellular Localization

Cell membrane; Single- pass type I membrane protein. Cytoplasm. Expressed on the cell surface in gastric epithelium, endothelial cells and fibroblasts and in the cytoplasm in keratinocytes and monocytes. Infection with human adenovirus 5 suppresses cell surface expression due to the adenoviral E3-19K protein which causes retention in the endoplasmic reticulum.

Tissue Specificity

Widely expressed with the exception of the central nervous system where it is absent. Expressed predominantly in gastric epithelium and also in monocytes, keratinocytes, endothelial cells, fibroblasts and in the outer layer of Hassal's corpuscles within the medulla of normal thymus. In skin, expressed mainly in the keratin layers, basal cells, ducts and follicles. Also expressed in many, but not all, epithelial tumors of lung, breast, kidney, ovary, prostate and colon. In thyomas, overexpressed in cortical and medullar epithelial cells. Tumors expressing MICA display increased levels of gamma delta T-cells.

Protein Name

MHC class I polypeptide-related sequence A



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 C-terminus of human MICA (304-334aa QSHWQTFHVSAVAAAAKFVEIIFYVRCCKKK).

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-MICA Picoband Antibody - Protein Information

Name MICA {ECO:0000312|EMBL:CAI41907.1}

Function

Seems to have no role in antigen presentation. Acts as a stress-induced self-antigen that is recognized by gamma delta T-cells. Ligand for the KLRK1/NKG2D receptor. Binding to KLRK1 leads to cell lysis.

Cellular Location

Cell membrane; Single-pass type I membrane protein. Cytoplasm. Note=Expressed on the cell surface in gastric epithelium, endothelial cells and fibroblasts and in the cytoplasm in keratinocytes and monocytes. Infection with human adenovirus 5 suppresses cell surface expression due to the adenoviral E3-19K protein which causes retention in the endoplasmic reticulum

Tissue Location

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Anti-MICA Picoband Antibody - Protocols

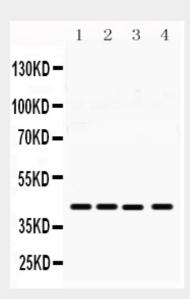
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot



- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Anti-MICA Picoband Antibody - Images



Anti- MICA Picoband antibody, ABO12298, Western blottingAll lanes: Anti MICA (ABO12298) at 0.5ug/mlLane 1: SW620Whole Cell Lysate at 40ugLane 2: A549 Whole Cell Lysate at 40ugLane 3: MCF-7 Whole Cell Lysate at 40ugLane 4: HELA Whole Cell Lysate at 40ugPredicted bind size: 43KDObserved bind size: 43KD

Anti-MICA Picoband Antibody - Background

This gene encodes the highly polymorphic major histocompatability complex class I chain-related protein A. The protein product is expressed on the cell surface, although unlike canonical class I molecules it does not seem to associate with beta-2-microglobulin. It is a ligand for the NKG2-D type II integral membrane protein receptor. And the protein functions as a stress-induced antigen that is broadly recognized by intestinal epithelial gamma delta T cells. Variations in this gene have been associated with susceptibility to psoriasis 1 and psoriatic arthritis, and the shedding of MICA-related antibodies and ligands is involved in the progression from monoclonal gammopathy of undetermined significance to multiple myeloma. Alternative splicing of this gene results in multiple transcript variants.