

MICA Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP8626c

Specification

MICA Antibody (Center) Blocking Peptide - Product Information

Primary Accession

Q29983

MICA Antibody (Center) Blocking Peptide - Additional Information

Gene ID 100507436

Other Names

MHC class I polypeptide-related sequence A, MIC-A, MICA {ECO:0000312|EMBL:CAI419071}

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP8626c was selected from the Center region of human MICA. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

MICA Antibody (Center) Blocking Peptide - 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



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.

MICA Antibody (Center) Blocking Peptide - Protocols

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

• Blocking Peptides

MICA Antibody (Center) Blocking Peptide - Images

MICA Antibody (Center) Blocking Peptide - Background

MICA is the higly polymorphic MHC (HLA) class I chain-related gene A. The protein product is expressed on the cell surface, although unlike canonical class I molecules does not seem to associate with beta-2-microglobulin. It is thought that MICA functions as a stress-induced antigen that is broadly recognized by intestinal epithelial gamma delta T cells.

MICA Antibody (Center) Blocking Peptide - References

Bahram, S., et.al., Proc. Natl. Acad. Sci. U.S.A. 91 (14), 6259-6263 (1994) Klein, J. et.al., Proc. Natl. Acad. Sci. U.S.A. 91 (14), 6251-6252 (1994) Parham, P., et.al., J. Immunol. 142 (11), 3937-3950 (1989)