

## **MICA Antibody (C-Terminus)**

Rabbit Polyclonal Antibody Catalog # ALS11697

### **Specification**

## MICA Antibody (C-Terminus) - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW

Dilution

Q29983 Human, Mouse Rabbit Polyclonal 43kDa KDa WB~~1:1000 IHC-P~~N/A

WB, IHC-P

# MICA Antibody (C-Terminus) - Additional Information

#### Gene ID 100507436

### **Other Names**

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

# **Target/Specificity**

a 16 amino acid peptide from near the carboxy terminus of human MICA

### **Reconstitution & Storage**

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

#### **Precautions**

MICA Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

### **MICA Antibody (C-Terminus) - Protein Information**

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

### **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:<a

href="http://www.uniprot.org/citations/11491531" target="\_blank">11491531</a>, PubMed:<a href="http://www.uniprot.org/citations/11777960" target="\_blank">11777960</a>). 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 (PubMed:<a href="http://www.uniprot.org/citations/10426993" target="\_blank">10426993</a>).

## **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**

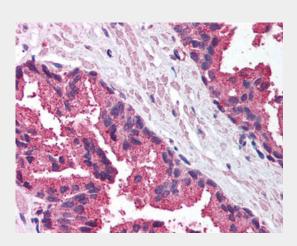
Widely expressed with the exception of the central nervous system where it is absent. Expressed predominantly in gastric epithelium and also in monocytes, keratinocytes, endothelial cells, fibroblasts and in the outer layer of Hassal's corpuscles within the medulla of normal thymus. In skin, expressed 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 (C-Terminus) - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## MICA Antibody (C-Terminus) - Images



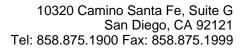
Anti-MICA antibody IHC of human prostate.

### MICA Antibody (C-Terminus) - Background

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.

# **MICA Antibody (C-Terminus) - References**

Bahram S., et al. Proc. Natl. Acad. Sci. U.S.A. 91:6259-6263(1994).





Bahram S.,et al.Immunogenetics 44:80-81(1996). Mungall A.J.,et al.Nature 425:805-811(2003). Leelayuwat C.,et al.Immunogenetics 40:339-351(1994). Fodil N.,et al.Immunogenetics 44:351-357(1996).