



Rabbit Anti-MICB antibody

SL6933R

Product Name:	MICB
Chinese Name:	MHC I类链相关蛋白B
Alias:	MHC class I chain related protein B2; MHC class I mic B antigen; MHC class I polypeptide related sequence B; MIC B; PERB11.2; MICB_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:50-200 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	40kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human MICB:81-180/383<Extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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.

Subunit:

Unlike classical MHC class I molecules, does not form a heterodimer with beta-2-microglobulin. Binds as a monomer to a KLRK1/NKG2D homodimer. KLRK1 forms a complex with HCST/DAP10 in which KLRK1 binds MICB while HCST acts as an adapter molecule which enables signal transduction. Receptor-ligand interaction induces clustering of both proteins in ordered structures called immune synapses and also leads to their intercellular transfer. This is associated with a reduction in the cytotoxicity of KLRK1-expressing cells. Binds to human cytomegalovirus glycoprotein UL16 which causes sequestration of MICB in the endoplasmic reticulum and increases resistance to KLRK1-mediated cytotoxicity.

Subcellular Location:

Cell membrane; Single pass type I membrane protein.

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.

Post-translational modifications:

Proteolytically cleaved and released from the cell surface of tumor cells.

DISEASE:

Genetic variations in MICA are a cause of susceptibility to rheumatoid arthritis (RA) [MIM:180300]. It is a systemic inflammatory disease with autoimmune features and a complex genetic component. It primarily affects the joints and is characterized by inflammatory changes in the synovial membranes and articular structures, widespread fibrinoid degeneration of the collagen fibers in mesenchymal tissues, and by atrophy and rarefaction of bony structures. Note=The MICB*004 allele is associated with rheumatoid arthritis.

Note=Genetic variation in MICB is associated with cytomegalovirus and herpes simplex virus I seropositivity and this may be associated with schizophrenia risk.

Similarity:

Belongs to the MHC class I family. MIC subfamily.
Contains 1 Ig-like C1-type (immunoglobulin-like) domain.

SWISS:

Q29983, Q29980

Gene ID:

4277

Database links:

[Entrez Gene: 4277](#)Human

[Omim: 602436](#)Human

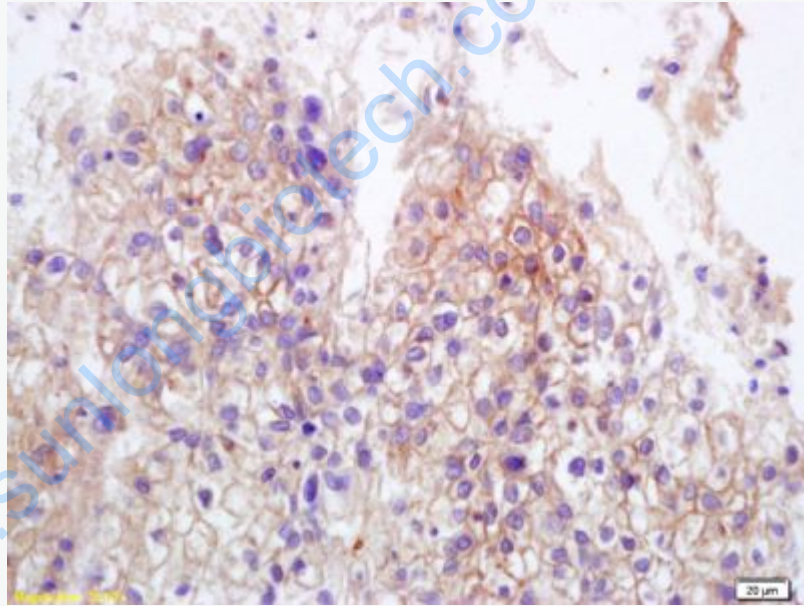
[SwissProt: Q29980](#)Human

[Unigene: 731446](#)Human

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



Tissue/cell: human lung carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-MICB Polyclonal Antibody, Unconjugated(SL6933R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and

	DAB(C-0010) staining
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