ARG23005
anti-MICA + MICB antibody [6D4]

Package: 100 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [6D4] recognizes MICA + MICB Mouse anti Human MICA/Micb antibody, clone 6D4 recognizes nonclassical MHC class I chain A (MICA) and nonclassical MHC class I chain MICB (MICB). MICA and MICB are stress inducible antigens, which are closely related and appear functionally indistinguishable. MICA and MICB are ligands for NKG2D, an activating receptor on most natural killer (NK) cells, CD8 T cells and gamma delta T cells. MICA is principally expressed on intestinal epithelium, and several epithelial tumours. Expression may be induced to high surface levels by heat shock, oxidative stress, and virus infection. Clone 6D4 is reported to inhibit the cytotoxicity of NK cells stimulated by IFN alpha-treated dendritic cells (Jinushi et al. 2003).
Tested Reactivity	Hu
Tested Application	CyTOF®-candidate, FACS, IHC-Fr, IP
Host	Mouse
Clonality	Monoclonal
Clone	6D4
Isotype	IgG2a
Target Name	MICA + MICB
Species	Human
Immunogen	MICA transfected C1R cells.
Conjugation	Un-conjugated
Alternate Names	MHC class I polypeptide-related sequence B; MIC-B; PERB11.2

Application Instructions

Application table

Application	Dilution
CyTOF®-candidate	Assay-dependent
FACS	Assay-dependent
IHC-Fr	1:100
IP	Assay-dependent

Application Note: FACS: Membrane permeabilisation is required for this application. Use 10 µl of the suggested working dilution to label 10^6 cells in 100 µl.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form	Liquid
Purification	Purification with Protein G.

Buffer	PBS and 0.09% Sodium azide
Preservative	0.09% Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	MICB
Gene Full Name	MHC class I polypeptide-related sequence B
Background	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. [provided by RefSeq, Jan 2014]
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. [UniProt]
Highlight	Related products: MICA antibodies; MICA ELISA Kits; Anti-Mouse IgG secondary antibodies; Related news: CyTOF-candidate Antibodies
Calculated Mw	43 kDa
PTM	Proteolytically cleaved and released from the cell surface of tumor cells.