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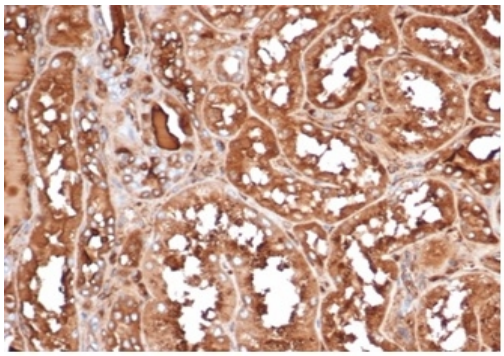
MICA

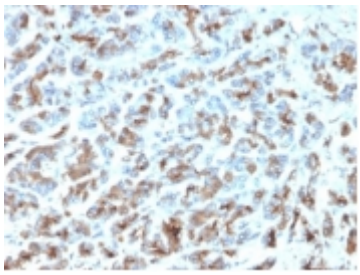
Mouse Monoclonal Antibody [Clone MICA/4443]

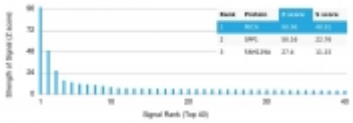
Catalog No	Format	Size	Price (USD)
100507436-MSM3-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug	219.00
100507436-MSM3-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug	499.00
100507436-MSM3-P1ABX	Purified Ab WITHOUT BSA at 1.0mg/ml	100 ug	499.00

Human Entrez Gene ID	100507436
Human SwissProt	Q29983
Human Unigene	130838 & 728757
Human Gene Symbol	MICA
Human Chromosome Location	6p21.33
Synonyms	HLA class I antigen; MHC class I chain related gene A protein antibody; MHC class I chain related protein A; MHC class I chain related protein A HLA B HLA C; MHC class I polypeptide related sequence A; MHC class I polypeptide-related sequence A; MHC class I related protein; MIC A; MIC-A; micA; PERB11.1; Stress inducible class I homolog

Immunogen	Recombinant fragment (around aa1-200) of human MICA (exact sequence is proprietary)
Host / Ig Isotype	Mouse / IgG2b, kappa
Mol. Weight of Antigen	92kDa
Cellular Localization	Cell surface. Cytoplasm.
Species Reactivity	Human, Mouse and Rat.
Positive Control	HeLa or MCF-7 cells. Human kidney, breast or prostate.







Formalin-fixed, paraffin-embedded human kidney stained with MICA Mouse Recombinant Monoclonal Antibody (MICA/4443). HIER: Tris/EDTA, pH9.0, 45min. 2Â°: HRP-polymer, 30min. DAB, 5min.

Specificity & Comments

MICA and MICB are stress-induced antigens that are related to major histocompatibility complex (MHC) class I molecules. MICA and MICB are frequently expressed in epithelial tumors. These highly glycosylated cell surface proteins are stably expressed without conventional class I peptide ligands or association with Î²-2-microglobulin. The expression is induced on proliferating or heat shock-stressed epithelial cells. MICA and MICB are broadly recognized by intestinal epithelial V •L1 Î³ •L T cells expressing variable TCRs, suggesting that these antigens may play a central role in the signaling of cellular distress to evoke immune responses in the intestinal epithelium.

Known Applications & Suggested Dilutions

Western Blot (1-2ug/ml)
Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT)
(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95 &degC followed by cooling at RT for 20 minutes)
Optimal dilution for a specific application should be determined.

Key References

1. Bedel, R., et al. 2011. Novel role for STAT3 in transcriptional regulation of NK immune cell targeting receptor MICA on cancer cells. Cancer Res. 71:1615-1626.

Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Limitations

This antibody is available for research use only and is not approved for use in diagnosis.

Warranty