DATASHEET

MHC class I Rabbit Monoclonal Antibody(C987)

CAT. NO. AMA00599

KEY FEATURES

Target	MHC class I	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat	Clonality	Monoclonal
Applications	WB, IHC, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in PBS, pH 7.4, containing 50% glycerol, 0.2% BSA and 0.01% sodium azide.	Storage	at-20°C

BACKGROUND

Antigen-presenting major histocompatibility complex class I (MHCI) molecule. In complex with B2M/beta 2 microglobulin displays primarily viral and tumor-derived peptides on antigen-presenting cells for recognition by alpha-beta T cell receptor (TCR) on HLA-A-restricted CD8-positive T cells, guiding antigen-specific T cell immune response to eliminate infected or transformed cells molecule. In complex with B2M/beta 2 microglobulin displays primarily viral and tumor-derived peptides on antigen-presenting cells for recognition by alpha-beta T cell receptor (TCR) on HLA-A-restricted CD8-positive T cells, guiding antigen-specific T cell immune response to eliminate infected or transformed cells .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:50 - 1:200
IF/ICC	1:50 - 1:200

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Recombinant rabbit monoclonal antibody to MHC class I
Specificity	Recognizes endogenous levels of MHC class I protein
Antibody Type	Primary antibody, Recombinant
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within human MHC class I. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 40; Observed: 41 kD
Form/Buffer	Liquid in PBS, pH 7.4, containing 50% glycerol, 0.2% BSA and 0.01% sodium azide.
Alternative Names	HLAA; HLA class I histocompatibility antigen, A-1 alpha chain; MHC class I antigen A*1; HLAB; HLA class I histocompatibility antigen, B-7 alpha chain; MHC class I antigen B*7; HLAA; HLA class I histocompatibility antigen, A-68 alpha chain; Aw-68; HLA class I histocompatibility antigen, A-28 alpha chain; MHC class I antigen A*68; HLAA; HLA class I histocompatibility antigen, A-2 alpha chain; MHC class I antigen A*2; HLAA; HLA class I histocompatibility antigen, A-11 alpha chain; MHC class I antigen A*11; HLAA; HLA class I histocompatibility antigen, A-30 alpha chain; MHC class I antigen A*30; HLAA; HLA class I histocompatibility antigen, A-26 alpha chain; MHC class I antigen A*26
Gene Symbol	HLA-A; HLA-B; HLA-C
Entrez Gene	3105; 3106; 3107(Human)
SwissProt	P30443; P01889; P01891; P01892; P13746; P16188; P30450(Human)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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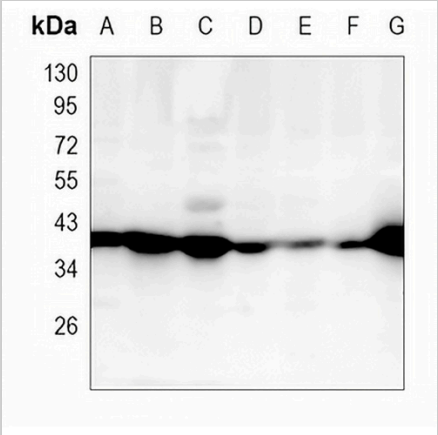
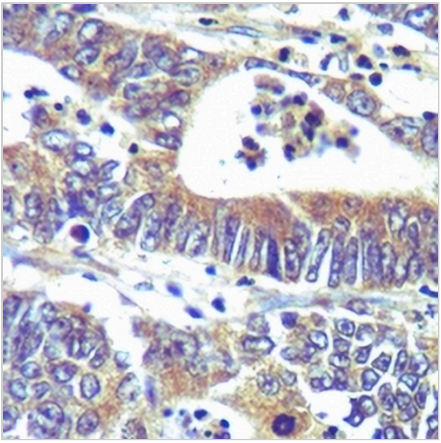
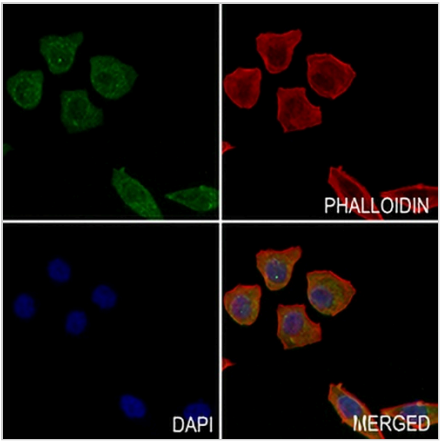


Western blot analysis of MHC class I expression in HEK293T (A), H1792 (B), HCT116 (C), mouse brain (D), mouse kidney (E), rat brain (F), rat kidney (G) whole cell lysates. (Predicted band size: 40; 41 kD; Observed band size: 41 kD)



Immunohistochemical analysis of MHC class I staining in human colon cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of MHC class I staining in MCF7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AREX® Fluor 488 -conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AREX® Fluor 594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.