

HLA class 1A, B, and C [EMR8-5] - 176Yb

Catalog: 717602

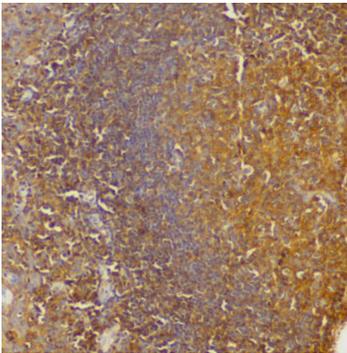
Clone: EMR8-5

Isotype: Mouse IgG1

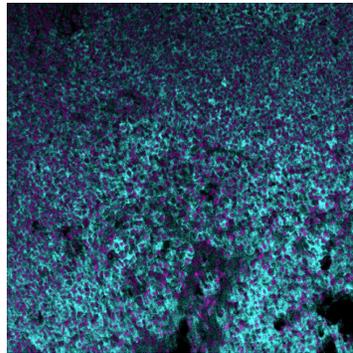
Reactivity: Human*

Application: MIBI-FFPE

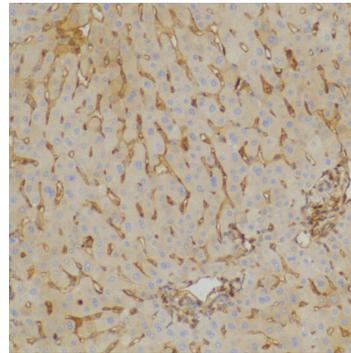
Storage: Supplied in antibody stabilizer with 0.05% sodium azide. Store at 4°C



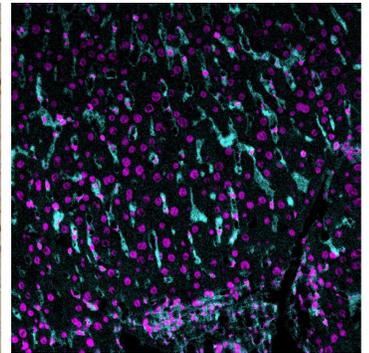
IHC: HLA Class I staining of FFPE human tonsil



MIBI: HLA Class I staining (cyan) of FFPE human tonsil, counterstained with dsDNA (magenta)



IHC: HLA Class I staining of FFPE human liver



MIBI: HLA Class I staining (cyan) of FFPE human liver, counterstained with dsDNA (magenta)

Background

Human leukocyte antigen (HLA) Class I A, B, and C are MHC class I proteins that present peptides to cytotoxic T cells and are expressed on all nucleated cells of vertebrates. The peptides are generated by the proteasome from intracellular proteins. In healthy cells these peptides will consist of self proteins but from infected cells some peptides will be from foreign proteins causing antigen-specific cytotoxic T cells to become activated and kill the cell. Certain viruses and tumors can downregulate HLA expression, avoiding detection by cytotoxic T cells that could recognize peptides from viral proteins or mutated proteins of cancer cells.

Validation

Each lot of conjugated antibody is quality control tested by staining tissue following the MIBI Staining Protocol optimized for the applicable tissue format with subsequent MIBIscope analysis using the appropriate positive and negative tissue field of views. These results are pathologist verified.

Recommended Usage

Human FFPE: 1:100 dilution. For optimal results, the antibody should be titrated for each desired application.

References

Coulie, P.G. et al. Tumour antigens recognized by T lymphocytes: at the core of cancer immunotherapy. *Nat Rev Cancer*. 2014; **14**(2):135-46.

Antoniou AN, Powis SJ, Elliott T. Assembly and export of MHC class I peptide ligands. *Curr Opin Immunol*. 2003; **15**:75-81.

* Conjugate tested on human tissue.