

**Mouse Anti-MHC Class I [F3]: MC128, MC0128RTU7**

**Intended Use:** For Research Use Only

**Description:** Major histocompatibility complex (MHC) molecules, also designated human leukocyte antigen (HLA) molecules, are cell-surface receptors that bind foreign peptides and present them to T lymphocytes. MHC class I molecules consist of two polypeptide chains, an  $\alpha$  or heavy chain, and  $\beta$ -2-Microglobulin, a non-covalently associated protein. Cytotoxic T lymphocytes bind antigenic peptides presented by MHC class I molecules. Antigens that bind to MHC class I molecules are typically 8-10 residues in length and are stabilized in a peptide binding groove. MHC class II molecules are encoded by polymorphic MHC genes and consist of a non-covalent complex of an  $\alpha$  and  $\beta$  chain. Helper T lymphocytes bind antigenic peptides presented by MHC class II molecules. MHC class II molecules bind 13-18 amino acid antigenic peptides. Accumulating in endosomal/lysosomal compartments and on the surface of B cells, HLA-DM and -DO molecules regulate binding of exogenous peptides to class II molecules (HLA-DR) by sustaining a conformation that favors peptide exchange. The differential structural properties of MHC class I and class II molecules account for their respective roles in activating different populations of T lymphocytes.

**Specifications**

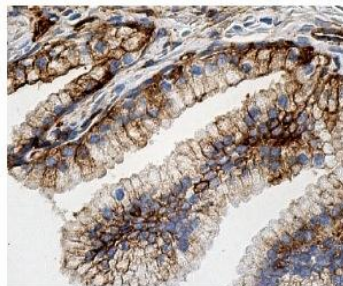
Clone:	F3
Source:	Mouse
Reactivity:	Human
Isotype:	IgG2a/k
Localization:	Membrane
Formulation:	Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN <sub>3</sub> )
Storage:	Store at 2°- 8°C
Applications:	IHC, ELISA, ICC/IF, IP, WB
Package:	

Description	Catalog No.	Size
MHC Class I [F3] Concentrated	MC0128	1 ml
MHC Class I [F3] Prediluted	MC0128RTU7	7 ml

**IHC Procedure\***

Positive Control Tissue:	Prostate, spleen
Concentrated Dilution:	50-200
Pretreatment:	Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
Incubation Time and Temp:	30-60 minutes @ RT
Detection:	Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE human prostate stained with MHC Class I using DAB

**References:**

1. Lipophilic statins limit cancer cell growth and survival, via involvement of Akt signaling. Beckwitt CH, et al. PLoS One. May 15;13(5), 2018.
2. Exosome release following activation of the dendritic cell immunoreceptor: a potential role in HIV-1 pathogenesis. Mfunyi CM, et al. Virology. Oct;484:103-12, 2015.
3. Exosome-loaded dendritic cells elicit tumor-specific CD8+ cytotoxic T cells in patients with glioma. Bu N, et al. J Neurooncol. Sep;104(3):659-67, 2011.

Doc. 100-MC0128  
Rev. A