HLA-ABC Antibody (MHC I) [clone 246-B8.E7] (V2569)

| Catalog No.	Formulation	Size
V2569-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2569-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2569SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

📙 Citations (1)   **Bulk quote request**

Availability	1-3 business days
Species Reactivity	Human, Mouse
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a, kappa
Clone Name	246-B8.E7
Purity	Protein G affinity chromatography
UniProt	P30443, P01889, P30499
Localization	Cell surface
Applications	Western Blot : 1-2ug/ml Flow Cytometry : 1-2ug/10^6 cells Immunofluorescence : 1-2ug/ml
Limitations	This HLA-ABC antibody is available for research use only.
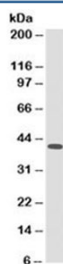
Western blot testing of ThP-1 cell lysate with HLA-ABC antibody. Expected molecular weight of A/B/C: 40-41 kDa.
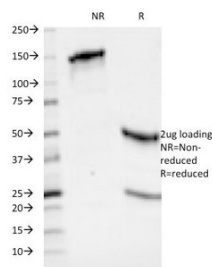
SDS-PAGE Analysis of Purified, BSA-Free HLA-ABC Antibody (clone 246-B8.E7). Confirmation of Integrity and Purity of the Antibody.

Description

HLA-ABC antibody clone 246-B8.E7 is a monoclonal antibody that detects class I human leukocyte antigens HLA-A, HLA-B, and HLA-C. These molecules are integral membrane glycoproteins responsible for presenting endogenous peptides to cytotoxic T lymphocytes. By displaying intracellular peptides on the cell surface, HLA class I molecules allow immune cells to monitor for viral infection, transformation, or other abnormalities. NSJ Bioreagents provides HLA-ABC antibody clone 246-B8.E7 as a high-quality reagent for immunology, transplantation, oncology, and infectious disease research.

The antibody produces strong membranous staining across nearly all nucleated cells, reflecting the broad distribution of HLA class I molecules in human tissues. In immunology, this antibody is routinely applied to study antigen presentation, immune surveillance, and T cell activation. It has been used to clarify how class I expression influences cytotoxic responses and how alterations in expression contribute to immune evasion.

In transplantation biology, HLA-ABC antibody clone 246-B8.E7 is essential for characterizing tissue compatibility. Accurate detection of class I expression provides insights into graft acceptance, rejection, and immune modulation. The antibody has been widely applied in histocompatibility testing and in research aimed at improving transplant outcomes.

In oncology, the antibody has been used to evaluate tumor immune evasion. Many cancers downregulate class I HLA molecules to avoid recognition by cytotoxic T lymphocytes, but such alterations can also trigger natural killer cell activation. Detecting HLA-ABC expression patterns in tumor samples provides valuable information about immune escape and therapeutic response.

In infectious disease research, the antibody has been applied to studies of viral infections such as HIV, cytomegalovirus, and hepatitis. Viruses often manipulate class I expression to evade immune detection, and this antibody supports investigations into viral-host interactions.

Validated in tissue and cell-based systems, the antibody consistently provides strong membranous staining with minimal background. Alternate names include HLA class I antibody, MHC class I antibody, and major histocompatibility complex antibody.

Application Notes

Optimal dilution of the HLA-ABC antibody should be determined by the researcher.

Immunogen

Human peripheral blood leukocytes were used as the immunogen for the HLA-ABC antibody.

Storage

Store the HLA-ABC antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).