

DESCRIPTION

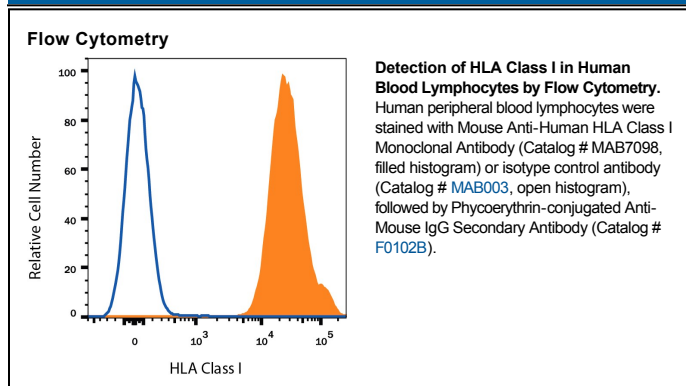
Species Reactivity	Human
Specificity	Detects the human major histocompatibility complex (MHC) class I, HLA-A, B, and C. Recognizes a non-polymorphic epitope shared among products of the HLA-A, B, and C loci and immunoprecipitates both the HLA molecule and beta 2-Microglobulin.
Source	Monoclonal Mouse IgG _{2A} Clone # W6/32
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Membranes from human tonsillar lymphocytes
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Flow Cytometry	0.25 µg/10 ⁶ cells	See Below
CyTOF-reported	This clone has been commercially reported for use in CyTOF®. Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

HLA-A, B, and C are approximately 45 kDa transmembrane glycoproteins in the major histocompatibility complex 1 (MHC I) family. They contain three alpha domains in their extracellular regions. HLA molecules are expressed on nearly all nucleated cells in association with the 12 kDa beta 2-Microglobulin. This complex binds peptides derived from pathogenic cytosolic or extracellular proteins such as viral or microbial proteins. It presents these peptides on the cell surface for recognition by the T cell receptor on CD8+ cytotoxic T cells. The activated cytotoxic T cell then kills the presenting cell. Mismatched MHC I alleles between a host and a donor lead to transplant rejection.

References:

1. Barnstable, C.J. *et al.* (1978) *Cell* 14:9.