

AM33374PU-N**Monoclonal Antibody to MHC Class I - Purified**

Alternate names:	HLA Class 1, MHC Class 1, Major Histocompatibility complex class I
Quantity:	0.5 ml
Concentration:	0.2 mg/ml
Background:	The major histocompatibility complex (MHC) is a cluster of genes that play an important role in the immune response. In humans, this complex is referred to as the Human Leucocyte Antigen (HLA) system. There are three major HLA class I genes which are HLA-A, HLA-B and HLA-C. These are highly polymorphic and thousands of alleles are known to exist. The HLA-A, B and C gene products are heterodimeric cell surface glycoproteins which all consist of a 40-45kD MHC-encoded alpha chain and a non-covalently linked non-MHC encoded light chain (b2-microglobulin) of 12kDa. These proteins are found on the surface of almost all nucleated cells and their role is to present peptides, produced by intracellular protein degradation, to cytotoxic T lymphocytes and natural killer cells.
Host / Isotype:	Mouse / IgG2a
Recommended Isotype Controls:	AM03096PU-N
Clone:	BRA-23/9
Immunogen:	REH cells, a Human pre-B cell leukaemia cell line.
Format:	State: Liquid purified IgG fraction Buffer System: PBS Preservatives: 0.02% Sodium Azide Stabilizers: 0.2% BSA, 50% Glycerol
Applications:	Flow Cytometry. Immunohistochemistry Frozen Sections. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	The antibody BRA-23/9 is directed against a non-polymorphic determinant of Human HLA Class I. The antibody has not been tested for cross reactivity with other species. The BRA-23/9 antibody is suitable for the detection of HLA Class I antigen by Flow Cytometry and Immunohistochemistry on Frozen tissues, for example from human tonsil, lymph nodes, as well as lymphocytes.
Species Reactivity:	Tested: Human.
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
General Readings:	1. Tanaka J, Toubai T, Tsutsumi Y, Miura Y, Kato N, Umehara S, et al. Cytolytic activity and regulatory functions of inhibitory NK cell receptor-expressing T cells expanded from granulocyte colony-stimulating factor-mobilized peripheral blood mononuclear

cells. *Blood*. 2004 Aug 1;104(3):768-74. Epub 2004 Apr 8. PubMed PMID: 15073036.
2. Tóth J, Kubes M. Masking of HLA class I molecules expressed on K-562 target cells can restore their susceptibility to NK cell cytotoxicity. *Immunobiology*. 1993 Jun;188(1-2):134-44. PubMed PMID: 8406556.