

SM504PS**Monoclonal Antibody to MHC Class I (monomorphic) - Purified**

Alternate names:	HLA Class 1, MHC Class 1, Major Histocompatibility complex class I
Quantity:	0.1 mg
Concentration:	1.0 mg/ml
Background:	MHC Class I molecules play a central role in the immune system by presenting peptides derived from the endoplasmic reticulum lumen. MHC class I antigens are heterodimers consisting of one alpha chain (44kDa) with beta 2 microglobulin (11.5 kDa). The antigen is expressed by all somatic cells at varying levels. MHC Class I molecules are expressed on most nucleated cells where they present endogenously synthesized antigenic peptides to CD8+ T lymphocytes, which are usually cytotoxic T cells. Fibroblasts or neurons however only show a low level of antigen.
Host / Isotype:	Mouse / IgG2a
Recommended Isotype Controls:	AM03096PU-N
Clone:	CVS22
Immunogen:	Equine leucocytes Remarks: Spleen cells from immunised mice were fused with cells of the X63.Ag 8.653 mouse myeloma cell line.
Format:	State: Liquid purified IgG Purification: Affinity chromatography on Protein G Buffer System: PBS containing 0.09% Sodium azide
Applications:	Flow cytometry: 1/25-1/200, use 10µl of this working dilution to label 10e6 cells in 100µl. Immunohistochemistry on frozen sections. Immunoprecipitation. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	All tissues Species: Equine (Horse). Other species not tested.
Storage:	Store the antibody 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.
Product Citations:	Originator or purchased from resellers: 1. Carrade DD, Lame MW, Kent MS, Clark KC, Walker NJ, Borjesson DL. Comparative Analysis of the Immunomodulatory Properties of Equine Adult-Derived Mesenchymal Stem Cells(). Cell Med. 2012;4(1):1-11. Epub 2012 Jan 1. PubMed PMID: 23152950.

General Readings:

1. O'Brien (1993) Ph D Thesis, University of Cambridge.
2. Kydd, J.H. and Antczak, D.F. (1991) First International Workshop on Equine Leucocyte Antigens 12th-13th July. Preliminary Report. Equine Immunol. 4 - 5.
3. Lunn DP, Holmes MA, Antczak DF, Agerwal N, Baker J, Bendali-Ahcene S, et al. Report of the Second Equine Leucocyte Antigen Workshop, Squaw valley, California, July 1995. Vet Immunol Immunopathol. 1998 Mar 31;62(2):101-43. PubMed PMID: 9638857.
4. Mérand C, Breathnach CC, Kohler K, Rashid C, Van Meter P, Horohov DW. Young foal and adult horse monocyte-derived dendritic cells differ by their degree of phenotypic maturity. Vet Immunol Immunopathol. 2009 Sep 15;131(1-2):1-8. doi: 10.1016/j.vetimm.2009.03.002. Epub 2009 Mar 14. PubMed PMID: 19349079.

Pictures:

Staining of equine peripheral blood lymphocytes with MHC Class I antibody Cat.-No. SM504PS, followed by FITC conjugated secondary antibody.

