

SM504F**Monoclonal Antibody to MHC Class I (monomorphic) - FITC**

Alternate names:	HLA Class 1, MHC Class 1, Major Histocompatibility complex class I
Quantity:	0.1 mg
Concentration:	0.1 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 and 1% BSA Label: FITC – Fluorescein Isothiocyanate Isomer 1
Applications:	Flow cytometry: Neat-1/10, use 10µl of this working dilution to label 10e6 cells in 100µl. 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 undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. This product is photosensitive and should be protected from light. 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. Mérant 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. SM504F.

