



Anti-HLA ABC monoclonal antibody, clone ZUI973.3 (DMABT-48777RH)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Rat Anti Human HLA ABCRat Anti Human HLA ABC
Immunogen	PHA activated human peripheral blood lymphocytes.
Isotype	IgG2b
Source/Host	Rat
Species Reactivity	Human
Clone	ZUI973.3
Conjugate	Unconjugated
Applications	IHC, ELISA, FC, FuncS, IF, IP, WB
Format	Purified IgG - liquid
Concentration	IgG concentration 1.0 mg/ml
Size	200 µg
Buffer	Phosphate buffered saline
Preservative	0.09% Sodium Azide
Storage	Store at +4 °C for one month or at -20 °C if preferred. This product should be stored undiluted. Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

BACKGROUND

Introduction

The human leucocyte antigen (HLA) system, originally discovered as the result of a transfusion reaction, is now known to play a crucial role in many areas of clinical medicine. The HLA molecules are encoded by a cluster of tightly linked genes located on the short arm of chromosome 6. Based on some of the structural and functional characteristics of the genes, the region has been divided into three: HLA class I, Class II and class III regions. The class I region contains genes encoding for the heavy chain of the HLA class I molecules. The HLA class I genes have been classified according to their structure, expression and function as classical (HLA-A, B and C) and non-classical (HLA-E, F and G). Both classical and non-classical HLA class I genes encode a heavy α chain, of approximately 43 kDa, non-covalently linked to a non-polymorphic light chain, the β 2-microglobulin which is encoded by a gene on chromosome 15. The main function of the HLA-A, B and C molecules is to present antigenic peptides, derived primarily but not exclusively from endogenous proteins, to CD8+ T-cells. HLA molecules are also known to be associated with a variety of autoimmune, non-autoimmune and infectious diseases and to restrict the antibody response to certain antigens and vaccines. HLA-A, -B and -C antigens are widely distributed on most human nucleated cells. However, the intensity of expression varies considerably, some cells being only weakly positive, e.g. thyroid and muscle cells, and others negative, e.g. cells of the exocrine pancreas and villous trophoblast cells. The intensity of HLA-ABC antigens may also be altered in pathological states. It has been described that malignant cells may lose HLA-ABC (1-4), whereas hepatocytes in alcoholic hepatitis, biliary cirrhosis and chronic active hepatitis express HLA-ABC, in contrast to normal liver hepatocytes on which HLA-ABC was not detected.

Keywords

HLA A; HLA B; HLA C; HLA class I A; HLA class I B; HLA class I C; Major histocompatibility complex, class I, A + B + C; MHC class I HLA A; MHC class I HLA B; MHC class I HLA C; MHC HLA ABC