

# HLA-B Monoclonal Mouse Antibody (EP-4)

## Product Description

This MAbs recognizes the HLA-B27 cell surface antigen on human cells. It may be used to HLA type human lymphocytes. Approximately 60% of patients with ankylosing spondylitis are HLA-B27 positive. This reagent can be used to help identify this HLA haplotype in human lymphocytes. Major histocompatibility complex (MHC) molecules form an integral part of the immune response system. They are cell-surface receptors that bind peptides and present them to T lymphocytes. Human leukocyte antigens (HLAs) are polymorphic members of the MHC family that are specifically involved in the presentation of antigens to the T cell receptor. There are two classes of HLA antigens: class I (HLA-A, HLA-B and HLA-C) and class II (HLA-D). Class I molecules are expressed in nearly all cells and play a central role in the immune system by presenting peptides derived from the endoplasmic reticulum. The differential structural properties of MHC class I and class II molecules account for their respective roles in activating different populations of T lymphocytes. HLA-B encodes a membrane anchored heavy chain, which hetero-dimerizes with a light chain (beta-2-microglobulin) to form MHC-I. Polymorphisms yield hundreds of HLA-B alleles. The HLA-B27 allele appears with increased frequency in uveitis patients.

This antibody is available purified with BSA/azide at 200 ug/mL, or BSA/azide-free at 1 mg/mL.

**Catalog number key for antibody number 1006, Anti-HLA-B (EP-4)**

## Product attributes

Antibody number	#1006
Antibody reactivity (target)	HLA-B
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	EP-4
Isotype	IgM, kappa
Molecular weight	~30 kDa
Synonyms	HLA-B, HLAB, MHC Class I HLA heavy chain, Leukocyte antigen class I-B
Human gene symbol	HLA-B
Entrez gene ID	3106
SwissProt	P03989
Unigene	77961
Immunogen	Lymphocytes from an HLA-B27 patient
Antibody target cellular localization	Plasma membrane
Species reactivity	Human
Antibody application notes	For coating for ELISA, order Ab without BSA, Optimal dilution and staining procedure for a specific application should be determined by user. Recommended starting concentrations for titration are 1-2 ug/mL for most applications, or 1 ug/million cells/100 uL for flow cytometry
Positive control	Human peripheral blood lymphocytes, tonsil or lymph node
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Antibody research areas	Cancer, Immunology, MHC antigens
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF@405S	404/431	405	DAPI (microscopy), AF405	<a href="#">CF@405S Features</a>
BNC88	CF@488A	490/515	488	GFP, FITC	<a href="#">CF@488A Features</a>
BNC68	CF@568	562/583	532, 561	RFP, TRITC	<a href="#">CF@568 Features</a>
BNC94	CF@594	593/614	561	Texas Red®	<a href="#">CF@594 Features</a>
BNC40	CF@640R	642/662	633-640	Cy@5	<a href="#">CF@640R Features</a>
BNC47	CF@647	650/665	633-640	Cy@5	<a href="#">CF@647 Features</a>
BNC74	CF@740	742/767	633-685	775/50	<a href="#">CF@740 Features</a>
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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