

## Anti-human HLA-C (clone L31)

Catalog No: MP-AA-7

### BACKGROUND

Class I Human Leukocyte Antigens (HLA -C ) are heterodimeric (heavy chain +  $\beta_2$ m) surface molecules that bind small peptide antigens and engage T lymphocytes and NK cells expressing the T cell receptor and Killer Immunoglobulin-like Receptors (KIR).

### PRODUCT

1. Each vial contains the indicated amount of IgG (caprylic acid purified) in 0,1% gelatine and 0,05 % NaN<sub>3</sub>.
2. Unpurified reagent is provided at the indicated amounts with 0.1% NaN<sub>3</sub>. Centrifuge the vial prior to use.

### SPECIFICITY

Mab L31 (IgG1) binds a linear epitope on HLA class I heavy chain alleles carrying an aromatic residue (Y/F) at position 67 (ref.1,2). These include most HLA-C (HLA-Cw1 through HLA-Cw8 + others) and a few cross-reacting HLA-B (HLA-B7, -B8, -B35, -B51 + others) alleles (ref.2).

L31 binds when these heavy chain are free of  $\beta_2$ m, denatured, or unfolded (ref. 1-6).

### STORAGE

Store frozen in aliquots and avoid repeated freeze-thawing. Stable 5 yrs.

### SHIPPING CONDITIONS

Room temperature.

### RESEARCH USE

This antibody is sold for laboratory research use only, not for human or in vivo use.

### APPLICATIONS

Optimal working conditions in each assay may vary in different labs, and titration is advisable.

#### *Flow cytometry*

L31 (10 to 20  $\mu$ g/ml) will stain 'free' heavy chains poorly surface-expressed in lymphoid and non-lymphoid cells and PBMCs (ref-1-3).

*Immunohistochemistry (fluorescence, enzymatic)*  
Acetone-fixed cryostatic sections and cytospins(10 to 50  $\mu$ g/ml) (ref.3). Formalin-fixed, paraffin-embedded sections as described (ref.4). Under these conditions a concentration of 100  $\mu$ g/ml and overnight incubation were found to provide the most consistent staining patterns.

#### *Immunoprecipitation*

One to 5  $\mu$ g using rabbit anti murine Ig and protein A-Sepharose beads (ref. 2-3,5,6).

#### *Western Blotting*

Use at 10  $\mu$ g/ml or less (ref.2).

### REFERENCES

1. *J Exp Med* (1991) **174**: 53-62.
2. *Hum Immunol* (1996) **46**: 69-81.
3. *Tissue Antigens*, (1997) **50**: 555-566.
4. *Am J Surg Pathol* (2007) **31**: 76-84.
5. *J Biol Chem* (2008) **283**: 16469-16476.
6. *J Biol Chem* (2008) **283**: 1267-1274.