

iFluor™ 700 Anti-human CD7 Antibody
HIT7Catalog number: 100700J0, 100700J1
Unit size: 100 tests, 500 tests**Product Details**

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| Storage Conditions | 2-8°C with minimized light exposure. Do not freeze. |
| Expiration Date | 12 months upon receiving |
| Concentration | 0.1 mg/mL |
| Formulation | Phosphate-buffered saline (PBS, pH 7.2), 0.09% sodium azide, 0.2% (w/v) BSA |

Antibody Properties

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| Species Reactivity | Human |
| Class | Primary |
| Clonality | Monoclonal |
| Host | Mouse |
| Isotype | Mouse IgG1 |
| Immunogen | CD7 (gp40, TP41) |
| Clone | HIT7 |
| Conjugate | iFluor™ 700 |

Biological Properties

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| Appearance | Blue liquid |
| Preparation | Antibody purified by affinity chromatography and then conjugated with iFluor™ 700 under optimal conditions |
| Application | Flow Cytometry (FACS), Fluorescence Imaging |

Spectral Properties

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| Conjugate | iFluor™ 700 |
| Excitation Wavelength | 690 nm |
| Emission Wavelength | 713 nm |

Applications

HIT7 is an anti-human monoclonal antibody that recognizes the CD7 antigen. CD7 (also known as gp40) is a 40 kD single-pass type I membrane protein that is located on the surface of cells like NK cells, stem cells and T cells. CD7 has been closely linked to essential biological processes such as immune response, particularly adaptive immune response. Furthermore, it is involved with important cellular pathways, namely, the

transmembrane receptor protein tyrosine kinase signaling pathway. From a research standpoint, it is of biological interest due to its association with vital macromolecules/ligands like PI3-Kinase. CD7 is a fairly uncommon antibody target, with a little more than 3600 publications in the last decade. Even still, CD7 is commonly used in flow cytometry applications as a phenotypic marker for differentiation of cell types, especially in the study of immunology and costimulatory molecules. This antibody was purified through affinity chromatography and conjugated to iFluor™ 700 (ex/em = 690/713 nm).