

# GMP FITC anti-human CD7 Antibody

Catalog# / Size	260118 / 100 tests
Clone	CD7-6B7
Other Names	gp40
lsotype	Mouse IgG2a, κ
Description	CD7 is a 40 kD type I transmembrane glycoprotein also known as gp40. It is a member of the immunoglobulin superfamily found on T cells, NK cells, thymocytes, hematopoietic progenitors, and monocytes (weakly). CD7 is also expressed on acute lymphocytic leukemia (ALL) and some acute myeloid leukemia (AML) cells. CD7 crosslinking induces a calcium flux in T lymphocytes, presumably as a result of cytoplasmic domain association with Pl3-kinase. CD7 costimulation can induce cytokine secretion and modulate cellular adhesion.

#### **Product Details**

Reactivity	Human					
Antibody Type	Monoclonal					
Host Species	Mouse					
Immunogen	KG1a cell line					
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).					
Preparation	The antibody was purified by affinity chromatography and conjugated with FITC under optimal conditions.					
Concentration	200 μg/mL					
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze</b> .					
Application	FC - Quality tested					
Recommended Usage	Each lot of this antibody is quality control tested by <u>immunofluorescent staining with flow cytometric</u> <u>analysis</u> . For flow cytometric staining, the suggested use of this reagent is 5 $\mu$ L per million cells in 100 $\mu$ L staining volume or 5 $\mu$ L per 100 $\mu$ L of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.					
Excitation Laser	Blue Laser (488 nm)					
Application Notes	<ul> <li>USA).</li> <li>The antibody was purified by affinity chromatography and conjugated with FITC under optimal conditions.</li> <li>200 µg/mL</li> <li>The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.</li> <li>FC - Quality tested</li> <li>Each lot of this antibody is quality control tested by <u>immunofluorescent staining with flow cytometric analysis</u>. For flow cytometric staining, the suggested use of this reagent is 5 µL per million cells in 100 µL staining volume or 5 µL per 100 µL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.</li> <li>Blue Laser (488 nm)</li> <li>Additional reported (for the relevant formats) applications include proteogenomics<sup>2</sup>.</li> <li>1. Knapp W, et al. 1989. Leucocyte Typing IV:White Cell Differentiation Antigens. Oxford University Press.</li> <li>2. Peterson VM, et al. 2017. Nat. Biotechnol. 35:936. (PG)</li> <li>GMP RUO Flow Cytometry Antibodies. BioLegend GMP RUO fluorophore conjugated antibodies are manufactured in a dedicated GMP facility and compliant with ISO 13485:2016. For research use only. Not for use in diagnostic or therapeutic procedures. Our processes include:</li> <li>Batch-to-batch consistency</li> <li>Material traceability</li> <li>Documented procedures</li> </ul>					
Application References	1. Knapp W, et al. 1989. Leucocyte Typing IV:White Cell Differentiation Antigens. Oxford University					
(PubMed link indicates BioLegend citation)						
Disclaimer						
	Material traceability					

- Equipment maintenance and monitoring records
- Equipment maintenance and monitor
  Lot-specific certificates of analysis
  Quality audits per ISO 13485:2016
  QA review of released products

#### **Antigen Details**

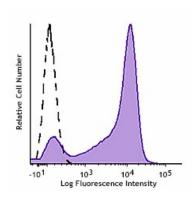
Structure	lg superfamily, type I transmembrane glycoprotein, 40 kD					
Distribution	T cells, NK cells, thymocytes, hematopoietic progenitors, myeloid leukemic cell subsets					
Function	T cell activation					
Ligand/Receptor	Cytoplasmic domain associates with P13-kinase					
Cell Type	Hematopoietic stem and progenitors, Leukemia, NK cells, T cells, Thymocytes					
Biology Area	Costimulatory Molecules, Immunology					
Molecular Family	CD Molecules					
Antigen References	<ol> <li>Barclay N, et al. 1993. The Leucocyte Antigen FactsBook. Academic Press Inc. San Diego.</li> <li>Stillwell R, et al. 2001. Immunol. Res. 24:31.</li> <li>Rabinowich H, et al. 1994. J. Immunol. 152:517.</li> </ol>					
Gene ID	924					

### **Related Protocols**

Cell Surface Flow Cytometry Staining Protocol

#### **Other Formats**

Purified anti-human CD7, FITC anti-human CD7, PE anti-human CD7, APC anti-human CD7, PE/Cyanine5 anti-human CD7, PE/Cyanine7 anti-human CD7, Purified anti-human CD7 (Maxpar® Ready), PerCP/Cyanine5.5 anti-human CD7, PE/Dazzle™ 594 anti-human CD7, APC/Fire™ 750 anti-human CD7, Alexa Fluor® 647 anti-human CD7, TotalSeq™-A0066 anti-human CD7, Alexa Fluor® 700 anti-human CD7, TotalSeq™-C0066 anti-human CD7, TotalSeq™-B0066 anti-human CD7, Pacific Blue™ anti-human CD7 Antibody, TotalSeq™-D0066 anti-human CD7, GMP APC anti-human CD7



Typical results from human peripheral blood lymphocytes stained either with CD7-6B7 FITC used at 5  $\mu$ L/test (filled histogram) or with an isotype control (open histogram).

## Symbols Glossary\*

Symbol	Meaning	Symbol Title	Symbol No.	Symbol	Meaning	Symbol Title	Symbol No.
REF	Catalog number	Catalogue number	5.1.6	Ĩ	Indicates the need for the user to consult the instructions for use.	Consult instructions for use	5.4.3
X	Indicates the temperature limits to which the medical device can be safely exposed.	Temperature limit	5.3.7	鯊	Indicates a medical device that needs protection from light sources.	Keep away from sunlight	5.3.2
X	Indicates the upper limit of temperature to which the medical device can be safely exposed.	temperature	5.3.6	Σ	Indicates the date after which the medical device is not to be used.	Use-by date	5.1.4
***	Indicates the medical device manufacturer.	Manufacturer	5.1.1	EC REP	Indicates the authorized representative in the European Community.	Authorized representative in the European Community	
LOT	Indicates the manufacturer's batch code so that the batch or lot can be identified.	Batch code	5.1.5	IVD	Indicates a medical device that is intended to be used as an in vitro diagnostic medical device.	<i>In vitro</i> diagnostic medical device	5.5.1

\* Symbol information is from EN ISO 15223-1:2016 Medical devices – Symbols to be used with medical device labels, labelling and information to be supplied – Part 1: General requirements

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