

## Monoclonal Antibody to CD7 - FITC

<b>Alternate names:</b>	GP40, Leu-9, T-cell leukemia antigen, TP41
<b>Catalog No.:</b>	SM3036F
<b>Quantity:</b>	100 Tests
<b>Concentration:</b>	1.0 mg/ml
<b>Background:</b>	CD7, also known as gp40, 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). CD7 crosslinking induces a calcium flux in T lymphocytes, presumably as a result of cytoplasmic domain association with PI3-kinase. CD7 co-stimulation can induce cytokine secretion and modulate cellular adhesion. A ligand of CD7, epithelial cell secreted protein K12, is produced in thymus to regulate thymocyte signaling and cytokine release. In lung microvascular endothelial cells CD7 serves as an IgM Fc receptor. Expression of CD7 is an important marker used in leukemia diagnostics.
<b>Uniprot ID:</b>	<a href="#">P09564</a>
<b>NCBI:</b>	<a href="#">NP_006128.1</a>
<b>GeneID:</b>	<a href="#">924</a>
<b>Host / Isotype:</b>	Mouse / IgG1
<b>Clone:</b>	MEM-186
<b>Immunogen:</b>	Human acute myelogenous leukaemia cell line KG-1
<b>Format:</b>	<b>State:</b> Liquid purified Ig fraction <b>Buffer System:</b> Phosphate buffered saline (PBS) containing 15 mM sodium azide and 0.2% (w/v) high-grade protease free Bovine Serum Albumin (BSA) as a stabilizing agent. <b>Label:</b> FITC – Conjugated with Fluorescein isothiocyanate under optimum conditions. The reagent is free of unconjugated and adjusted for direct use
<b>Applications:</b>	Flow Cytometry analysis of human blood cells using 20 µl reagent / 100 µl whole blood or 10e6 cells in a suspension. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	The antibody reacts with CD7, a 40 kD type I transmembrane glycoprotein expressed on peripheral blood T lymphocytes, NK-cells, hematopoietic progenitors, monocytes (weakly) and also on acute lymphocytic leukemia. <b>Species:</b> Human. Other species not tested.

**For research and in vitro use only. Not for diagnostic or therapeutic work.**

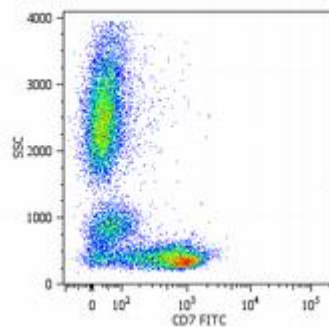
Material Safety Datasheets are available at [www.acris-antibodies.com](http://www.acris-antibodies.com) or on request.

Antibody Hotline - Technical Questions - Antibody Location Service  
Free Call: 0800-2274746 (Germany only) - [www.acris-antibodies.com](http://www.acris-antibodies.com)

**Storage:** Store the antibody at 2 - 8 °C. DO NOT FREEZE! This product is photosensitive and should be protected from light.  
Shelf life: one year from despatch.

**General References:** Alaibac M, Pigozzi B, Belloni-Fortina A, Michelotto A, Saponeri A, Peserico A. CD7 expression in reactive and malignant human skin T-lymphocytes. *Anticancer Res.* 2003 May-Jun;23(3B):2707-10.  
Lam GK, Liao HX, Xue Y, Alam SM, Scearce RM, Kaufman RE, Sempowski GD, Haynes BF. Expression of the CD7 ligand K-12 in human thymic epithelial cells: regulation by IFN-gamma. *J Clin Immunol.* 2005 Jan;25(1):41-9.  
Nishimura M, Takanashi M, Okazaki H, Satake M, Nakajima K.: Role of CD7 expressed in lung microvascular endothelial cells as Fc receptor for immunoglobulin M. *Endothelium.* 2006 Jul-Aug;13(4):287-92.  
Chang H, Yeung J, Brandwein J, Yi QL.: CD7 expression predicts poor disease free survival and post-remission survival in patients with acute myeloid leukemia and normal karyotype. *Leuk Res.* 2007 Feb;31(2):157-62. Epub 2006 Jul 11.  
Leukocyte Typing VI., Kishimoto T. et al. (Eds.), Garland Publishing Inc. (1997).

**Pictures:**



Surface staining of human peripheral blood cells with anti-human CD7 (MEM-186) FITC.

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