

TECHNICAL DATA SHEET

CyFlow™ CD4 APC Anti-Rt; Clone OX-35

REF CS372844



Sysmex Partec GmbH
 Arndtstraße 11 a-b
 02826 Görlitz
 Germany
 Tel.: +49 3581 8746 0
 E-mail: info@sysmex-partec.com
 www.sysmex-partec.com

Distributed in the U.S.A. and Canada by:
Sysmex America, Inc.
 577 Aptakisic Road
 Lincolnshire, IL 60069, U.S.A.
 Tel.: 1-888-879-7639 or 1-847-367-3503
 E-mail: cytometry@sysmex.com
<https://us.sysmex-flowcytometry.com/>

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD4
Alternative Names	T4, Leu3a
Clone	OX-35
Clonality	monoclonal
Format	APC
Host / Isotype	Mouse / IgG2a
Species Reactivity	Rat
Negative Species Reactivity	—
Quantity [Concentration]	0.1 mg [0.5 mg/mL]
Immunogen	MLR generated rat Th cells



Specificity

The mouse monoclonal antibody OX-35 recognizes an extracellular epitope of rat CD4 transmembrane glycoprotein (55 kDa).

Application

The reagent is designed for flow cytometry analysis. Working concentrations should be determined by the investigator.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in phosphate buffered saline (PBS) solution, pH \approx 7.4, containing 0.09% (w/v) sodium azide.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

CD4 (T4, Leu3a) is a 55 kDa single-chain transmembrane glycoprotein expressed on a subset of T lymphocytes ("helper" T-cells) and also on monocytes, tissue macrophages and granulocytes. In extracellular region there are 4 immunoglobulin-like domains (1 Ig-like V-type and 3 Ig-like C2-type). Transmembrane region forms 25 aa, cytoplasmic tail consists of 38 aa. Domains 1, 2 and 4 are stabilized by disulfide bonds. The intracellular domain of CD4 is associated with p56Lck, a Src-like protein tyrosine kinase.

Warnings

Non-Hazardous Statement: This is not considered hazardous by the criteria in 29 CFR 1910.1200 or the General Classification guideline for preparations of the EU.

Safety Data Sheet Statement: Important information regarding the safe handling, transport, and disposal of this product is contained in the Safety Data Sheet (SDS). SDS are available at <http://www.sysmex-partec.com/services>, or at <https://us.sysmex-flowcytometry.com/> (U.S. customers only).

References

- Dragun D, Lukitsch I, Tullius SG, Qun Y, Park JK, Schneider W, Luft FC, Haller H: Inhibition of intercellular adhesion molecule-1 with antisense deoxynucleotides prolongs renal isograft survival in the rat. *Kidney Int.* 1998 Dec; 54(6):2113-22. < PMID: 9853277 >

- Salomon I, Netzer N, Wildbaum G, Schif-Zuck S, Maor G, Karin N: Targeting the function of IFN-gamma-inducible protein 10 suppresses ongoing adjuvant arthritis. *J Immunol.* 2002 Sep 1; 169(5):2685-93. < PMID: 12193742 >
- Tsuji H, Kawaguchi S, Wada T, Nagoya S, Inobe M, Yamashita T, Ishii S, Uede T: Adenovirus-mediated in vivo B7-1 gene transfer induces anti-tumor immunity against pre-established primary tumor and pulmonary metastasis of rat osteosarcoma. *Cancer Gene Ther.* 2002 Sep; 9(9):747-55. < PMID: 12189524 >
- Yan Y, Devos T, Yu L, Xia G, Rutgeerts O, Goebels J, Segers C, Lin Y, Vandeputte M, Waer M: Pathogenesis of autoimmunity after xenogeneic thymus transplantation. *J Immunol.* 2003 Jun 15; 170(12):5936-46. < PMID: 12794120 >
- Baba T, Ishizu A, Iwasaki S, Suzuki A, Tomaru U, Ikeda H, Yoshiki T, Kasahara M: CD4+/CD8+ macrophages infiltrating at inflammatory sites: a population of monocytes/macrophages with a cytotoxic phenotype. *Blood.* 2006 Mar 1; 107(5):2004-12. < PMID: 16269616 >
- Gelderman KA, Hultqvist M, Holmberg J, Olofsson P, Holmdahl R: T cell surface redox levels determine T cell reactivity and arthritis susceptibility. *Proc Natl Acad Sci USA.* 2006 Aug 22; 103(34):12831-6. < PMID: 16908843 >
- Baba T, Iwasaki S, Maruoka T, Suzuki A, Tomaru U, Ikeda H, Yoshiki T, Kasahara M, Ishizu A: Rat CD4+CD8+ macrophages kill tumor cells through an NKG2D- and granzyme/perforin-dependent mechanism. *J Immunol.* 2008 Mar 1; 180(5):2999-3006. < PMID: 18292522 >
- Ramiro-Puig E, Pérez-Cano FJ, Ramos-Romero S, Pérez-Berezo T, Castellote C, Permanyer J, Franch A, Izquierdo-Pulido M, Castell M: Intestinal immune system of young rats influenced by cocoa-enriched diet. *J Nutr Biochem.* 2008 Aug; 19(8):555-65. < PMID: 18061430 >
- Hishikari K, Suzuki J, Ogawa M, Isobe K, Takahashi T, Onishi M, Takayama K, Isobe M: Pharmacological activation of the prostaglandin E2 receptor EP4 improves cardiac function after myocardial ischaemia/reperfusion injury. *Cardiovasc Res.* 2009 Jan 1; 81(1):123-32. < PMID: 18805784 >
- Viel EC, Lemarié CA, Benkirane K, Paradis P, Schiffrin EL: Immune regulation and vascular inflammation in genetic hypertension. *Am J Physiol Heart Circ Physiol.* 2010 Mar; 298(3):H938-44. < PMID: 20044442 >
- Monzon-Casanova E, Steiniger B, Schweigle S, Clemen H, Zdzieblo D, Starick L, Müller I, Wang CR, Rhost S, Cardell S, Pyz E, Herrmann T: CD1d expression in paneth cells and rat exocrine pancreas revealed by novel monoclonal antibodies which differentially affect NKT cell activation. *PLoS One.* 2010 Sep 30; 5(9):pii:e13089. < PMID: 20927351 >

Symbols

 REF	Reference number		Contains sufficient for <n> tests
 RUO	For research use only		Temperature limit
 LOT	Batch code		Keep away from sunlight
	Manufacturer		Consult accompanying documents
	Use-by date	 UDI	Unique device identifier