

TECHNICAL DATA SHEET

CyFlow™ CD324 FITC Anti-Hu; Clone 67A4





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	CD324			
Alternative Names	E-Cadherin, CDH1, LCAM, CDHE, Arc-1, UVO			
Clone	67A4			
Clonality	monoclonal			
Format	FITC			
Host / Isotype	Mouse / IgG1			
Species Reactivity	Human			
Negative Species Reactivity	_			
Quantity	100 tests			
Immunogen	T-47D cells			



Specificity

The mouse monoclonal antibody 67A4 recognizes CD324 (E-cadherin) antigen, a 100 kDa epithelial cell adhesion molecule, whose detection is important for determination of invasive potential of epithelial neoplasms.

Application

The reagent is designed for flow cytometry analysis of human blood cells. Recommended usage is 20 μ l reagent / 100 μ l of whole blood or 10⁶ cells in a suspension. The content of a vial (2 ml) is sufficient for 100 tests.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in stabilizing phosphate buffered saline (PBS) solution, pH \approx 7.4, containing 0.09% (w/v) sodium azide and 0.2% (w/v) BSA.

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

CD324 (E-cadherin) is an epithelial cell surface molecule, which provides calcium-dependent homophilic interactions with E-cadherin of another cell. These intaractions take part in morphogenetic programs controlling the maintenance of the structural and functional integrity of epithelia and affect invasive potential of epithelial neoplasms. CD324 (E-cadherin) is implicated in cell growth and differentiation, cell recognition, and sorting during developmental morphogenesis, as well as in aggregation-dependent cell survival. CD324 (E-cadherin)-mediated cell adhesion system is highly regulated from inside the cell by a number of intracellular signaling pathways.

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

- Takeichi M: Cadherin cell adhesion receptors as a morphogenetic regulator. Science. 1991 Mar 22;
 251(5000):1451-5. < PMID: 2006419 >
- Armeanu S, Bühring HJ, Reuss-Borst M, Müller CA, Klein G: E-cadherin is functionally involved in the maturation of the erythroid lineage. J Cell Biol. 1995 Oct; 131(1):243-9.
- Bühring HJ, Müller T, Herbst R, Cole S, Rappold I, Schuller W, Zhu X, Fritzsch U, Faul C, Armeanu S, Ullrich A, Klein G, Schmidt H: The adhesion molecule E-cadherin and a surface antigen recognized by the antibody 9C4 are selectively expressed on erythroid cells of defined maturational stages. Leukemia. 1996 Jan; 10(1):106-1. < PMID: 8558914 >
- Pece S, Chiariello M, Murga C, Gutkind JS: Activation of the protein kinase Akt/PKB by the formation of E-cadherin-mediated cell-cell junctions: Evidence for the association of phosphatidylinositol 3-kinase with the E-cadherin adhesion complex. J Biol Chem. 1999 Jul 2; 274(27):19347-51. < PMID: 10383446 >
- Servet-Delprat C, Vidalain PO, Bausinger H, Manié S, Le Deist F, Azocar O, Hanau D, Fischer A, Rabourdin-Combe C: Measles virus induces abnormal differentiation of CD40 ligand-activated human dendritic cells. J Immunol. 2000 Feb 15; 164(4):1753-60. < PMID: 10657621 >
- Pece S, Gutkind JS: Signaling from E-cadherins to the MAPK pathway by the recruitment and activation of epidermal growth factor receptors upon cell-cell contact formation. J Biol Chem. 2000 Dec 29; 275(52):41227-33. < PMID: 10969083 >
- Novak N, Kraft S, Haberstok J, Geiger E, Allam P, Bieber T: A reducing microenvironment leads to the generation of FcepsilonRlhigh inflammatory dendritic epidermal cells (IDEC). J Invest Dermatol. 2002 Oct; 119(4):842-9. < PMID: 12406329 >
- Kutlesa S, Wessels JT, Speiser A, Steiert I, Müller CA, Klein G: E-cadherin-mediated interactions of thymic epithelial cells with CD103+ thymocytes lead to enhanced thymocyte cell proliferation. J Cell Sci. 2002 Dec 1; 115(23):4505-15. < PMID: 12414996 >
- Robertson H, Ali S, McDonnell BJ, Burt AD, Kirby JA: Chronic renal allograft dysfunction: the role of T cell-mediated tubular epithelial to mesenchymal cell transition. J Am Soc Nephrol. 2004 Feb; 15(2):390-7.
 < PMID: 14747385 >



- Furio L, Guezennec A, Ducarre B, Guesnet J, Peguet-Navarro J: Differential effects of allergens and irritants on early differentiating monocyte-derived dendritic cells. Eur J Dermatol. 2008 Mar-Apr; 18(2):141-7.
 PMID: 18424372 >
- Caberg JH, Hubert PM, Begon DY, Herfs MF, Roncarati PJ, Boniver JJ, Delvenne PO: Silencing of E7 oncogene restores functional E-cadherin expression in human papillomavirus 16-transformed keratinocytes. Carcinogenesis. 2008 Jul; 29(7):1441-7. < PMID: 18566017 >
- Lin JC, Liao SK, Lee EH, Hung MS, Sayion Y, Chen HC, Kang CC, Huang LS, Cherng JM: Molecular events
 associated with epithelial to mesenchymal transition of nasopharyngeal carcinoma cells in the absence of
 Epstein-Barr virus genome. J Biomed Sci. 2009 Nov 24; 16:105. < PMID: 19930697 >

Symbols

REF	Reference number	Σ	Contains sufficient for <n> tests</n>
RUO	For research use only	1	Temperature limit
LOT	Batch code	类	Keep away from sunlight
	Manufacturer	[]i	Consult accompanying documents
	Use-by date	UDI	Unique device identifier