

11-221-C025

Monoclonal Antibody to CD44 Purified Antibody (0.025 mg)

Clone:	MEM-85
Isotype:	Mouse IgG2b
Specificity:	<p>The antibody MEM-85 reacts with both cell surface-expressed and soluble form of CD44 antigen (Phagocyte glycoprotein 1), a 80-95 kDa transmembrane glycoprotein (hyaladherin family) present on the most of cells and tissues (leukocytes, endothelial cells, mesenchymal cells, etc.); it is negative on platelets and hepatocytes.</p> <p>HLDA IV; WS Code NL 706 HLDA VI; WS Code AS Ref.15</p>
Regulatory Status:	RUO
Immunogen:	Leukocytes of a patient suffering from LGL Type Leukaemia.
Species Reactivity:	Human
Application:	<p>Flow Cytometry Recommended dilution: 1 µg/ml Immunoprecipitation Western Blotting Recommended dilution: 2 µg/ml, 60 min on vertical incubator Positive control: Kg-1a human leukemia cell lysate Sample preparation: Resuspend approx. 50 mil. cells in 1 ml cold Lysis buffer (1% laurylmaltoside in 20 mM Tris/Cl, 100 mM NaCl pH 8.2, 50 mM NaF including Protease inhibitor Cocktail). Incubate 60 min on ice. Centrifuge to remove cell debris. Mix lysate with non-reducing SDS-PAGE sample buffer. Application note: Non-reducing conditions. SDS-PAGE (6% separating gel). ELISA</p>
Purity:	> 95% (by SDS-PAGE)
Purification:	Purified by protein-A affinity chromatography
Concentration:	1 mg/ml
Storage Buffer:	Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4
Storage / Stability:	Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial label.
Expiration:	See vial label
Lot Number:	See vial label
Background:	<p>CD44 is a transmembrane glycoprotein expressed on the surface of most cells, which serves as a receptor for hyaluronan. CD44 mediates angiogenesis, cell adhesion, proliferation and migration, it is thus important for lymphocyte activation, recirculation and homing, it can thus serve e.g. as a modulator of macrophage recruitment in response to pathogen. Although CD44 functions are essential for physiological activities of normal cells, elevated CD44 expression correlates with poor prognosis in many carcinomas, facilitating tumour growth and metastasis, antiapoptosis and directional motility of cancer cells.</p>

For laboratory research only, not for drug, diagnostic or other use.

**Antibodies****References:**

- *Vigetti D, Viola M, Karousou E, Rizzi M, Moretto P, Genasetti A, Clerici M, Hascall VC, De Luca G, Passi A: Hyaluronan-CD44-ERK1/2 regulate human aortic smooth muscle cell motility during aging. *J Biol Chem.* 2007 Dec 12
- *Hollingsworth JW, Li Z, Brass DM, Garantziotis S, Timberlake SH, Kim A, Hossain I, Savani RC, Schwartz DA. CD44 regulates macrophage recruitment to the lung in lipopolysaccharide-induced airway disease. *Am J Respir Cell Mol Biol.* 2007 Aug;37(2):248-53.
- *Liu J, Bi G, Wen P, Yang W, Ren X, Tang T, Xie C, Dong W, Jiang G. Down-regulation of CD44 contributes to the differentiation of HL-60 cells induced by ATRA or HMBA. *Cell Mol Immunol.* 2007 Feb;4(1):59-63.
- *Subramaniam V, Gardner H, Jothy S: Soluble CD44 secretion contributes to the acquisition of aggressive tumor phenotype in human colon cancer cells. *Exp Mol Pathol.* 2007 Dec;83(3):341-6.
- *Subramaniam V, Vincent IR, Gardner H, Chan E, Dhamko H, Jothy S: CD44 regulates cell migration in human colon cancer cells via Lyn kinase and AKT phosphorylation. *Exp Mol Pathol.* 2007 Oct;83(2):207-15.
- *Stefanová I, Hilgert I, Bazil V, Kristofová H, Horejsí V: Human leucocyte surface glycoprotein CDw44 and lymphocyte homing receptor are identical molecules. *Immunogenetics.* 1989;29(6):402-4.
- *Leukocyte Typing IV., Knapp W. et al. (Eds.), Oxford University Press (1989).
- *Leukocyte Typing VI., Kishimoto T. et al. (Eds.), Garland Publishing Inc. (1997).
- *Bazil V, Strominger JL: Metalloprotease and serine protease are involved in cleavage of CD43, CD44, and CD16 from stimulated human granulocytes. Induction of cleavage of L-selectin via CD16. *J Immunol.* 1994 Feb 1;152(3):1314-22.
- *Ilangumaran S, Briol A, Hoessli DC: CD44 selectively associates with active Src family protein tyrosine kinases Lck and Fyn in glycosphingolipid-rich plasma membrane domains of human peripheral blood lymphocytes. *Blood.* 1998 May 15;91(10):3901-8.
- *Kolar GR, Mehta D, Pelayo R, Capra JD: A novel human B cell subpopulation representing the initial germinal center population to express AID. *Blood.* 2007 Mar 15;109(6):2545-52.
- *Schmidt D, Achermann J, Odermatt B, Breyman C, Mol A, Genoni M, Zund G, Hoerstrup SP: Prenatally fabricated autologous human living heart valves based on amniotic fluid derived progenitor cells as single cell source. *Circulation.* 2007 Sep 11;116(11 Suppl):I64-70.
- *Kanderova V, Kuzilkova D, Stuchly J, Vaskova M, Brdicka T, Fiser K, Hrusak O, Lund-Johansen F, Kalina T: High-resolution Antibody Array Analysis of Childhood Acute Leukemia Cells. *Mol Cell Proteomics.* 2016 Apr;15(4):1246-61.

Unless indicated otherwise, all products are For Research Use Only and not for diagnostic or therapeutic use. Not for resale or transfer either as a stand-alone product or as a component of another product without written consent of EXBIO. EXBIO will not be held responsible for patent infringement or other violations that may occur with the use of our products. All orders are accepted subject to EXBIO's term and conditions which are available at www.exbio.cz.

For laboratory research only, not for drug, diagnostic or other use.