

SM286R

Monoclonal Antibody to CD54 / ICAM1 - PE

Alternate names:	ICAM-1, Intercellular adhesion molecule 1, Major Group Rhinovirus Receptor
Quantity:	100 Tests
Background:	CD54 is a 90kD adhesion molecule belonging to the immunoglobulin superfamily. CD54 is a cell surface ligand of the lymphocyte integrin, LFA-1 and is known to play an important role in various cell-cell interactions in the immune system.
Uniprot ID:	Q00238
NCBI:	NP_037099.1
GeneID:	25464
Host / Isotype:	Mouse / IgG1
Recommended Isotype Controls:	SM20R (for use in rat samples)
Clone:	1A29
Immunogen:	Rat Ax cells (a HEV derived cell line). Spleen cells from immunised BALB/c mice were fused with cells from the PAI mouse myeloma cell line.
Format:	State: Lyophilized purified IgG Purification: Affinity chromatography on Protein G Buffer System: PBS, pH 7.4 containing 0.09% Sodium Azide and 1% Bovine Serum Albumin Label: PE – R. Phycoerythrin (RPE) Reconstitution: Restore with 1 ml distilled water
Applications:	Flow cytometry. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody recognises the CD54 cell surface antigen, also known as intercellular adhesion molecule-1 (ICAM-1). Recent studies suggest that cross-linking of ICAM-1 using clone 1A29 induces calcium signalling. Functionally 1A29 inhibits homotypic aggregation of PHA blasts. We recommend the use of SM286LE for use in functional studies. Species: Rat. Other species not tested.
Storage:	Prior to and following reconstitution store the antibody at 2-8°C. DO NOT FREEZE! This product is photosensitive and should be protected from light. Shelf life: 6 month from despatch.
General Readings:	1. Tamatani T, Miyasaka M. Identification of monoclonal antibodies reactive with the rat homolog of ICAM-1, and evidence for a differential involvement of ICAM-1 in the adherence of resting versus activated lymphocytes to high endothelial cells. <i>Int Immunol.</i> 1990;2(2):165-71. PubMed PMID: 2088483. 2. Tamatani T, Kotani M, Tanaka T, Miyasaka M. Molecular mechanisms underlying

lymphocyte recirculation. II. Differential regulation of LFA-1 in the interaction between lymphocytes and high endothelial cells. Eur J Immunol. 1991 Mar;21(3):855-8. PubMed PMID: 1672652.

3. Etienne-Manneville S, Manneville JB, Adamson P, Wilbourn B, Greenwood J, Couraud PO. ICAM-1-coupled cytoskeletal rearrangements and transendothelial lymphocyte migration involve intracellular calcium signaling in brain endothelial cell lines. J Immunol. 2000 Sep 15;165(6):3375-83. PubMed PMID: 10975856.