For Research Use Only

Rat ICAM-1/CD54 Recombinant antibody, PBS Only (Capture)

Catalog Number:83696-3-PBS



Basic Information

Catalog Number:

83696-3-PBS NM_012967.1

Size: GeneID (NCBI): 100ug, Concentration: 1 mg/ml by 25464

Nanodrop; UNIPROT ID:
Source: Q00238
Rabbit Full Name:

Isotype: intercellular adhesion molecule 1

IgG Calculated MW:

60 kDa Observed MW: 85 kDa

GenBank Accession Number:

Purification Method: Protein A purification

CloneNo.: 240725C2

Applications

Tested Applications:

WB, IHC, IF-P, Cytometric bead array, Indirect ELISA

Species Specificity:

rat

Product Information

83696-3-PBS targets ICAM-1/CD54 as part of a matched antibody pair:

MP00678-1: 83696-3-PBS capture and 83696-1-PBS detection (validated in Cytometric bead array)

MP00678-3: 83696-3-PBS capture and 83696-2-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

Background Information

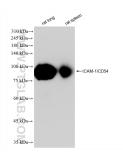
ICAM-1 (CD54) is a transmembrane glycoprotein of the immunoglobulin superfamily and is critical for the firm attachment and transmigration of leukocytes out of blood vessels and into tissues (PMID: 19307690). ICAM-1 is expressed by several cell types, typically on endothelial cells and cells of the immune system, and its expression can be up-regulated by various stimuli, including TNF-a, INF-y, IL-1 and thrombin (PMID: 3086451; 9694714; 15979056). It is a ligand for LFA-1 and Mac-1, serves as a receptor for rhinovirus, and is one of several receptors used by Plasmodium falciparum (PMID: 2566624; 2538244; 2475784).

Storage

Storage: Store at -80°C.

Storage Buffer: PBS Only

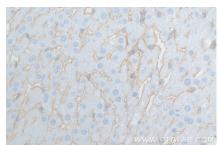
Selected Validation Data



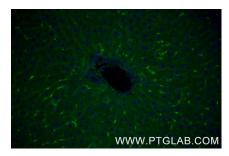
Various lysates were subjected to SDS PAGE followed by western blot with 83696-3-RR (ICAM-1/CD54 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83696-3-PBS in a different storage buffer formulation.



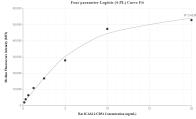
Immunohistochemical analysis of paraffinembedded rat liver tissue slide using 83696-3-RR (ICAM-1/CD54 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83696-3-PBS in a different storage buffer formulation.



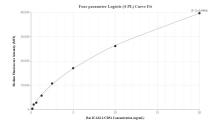
Immunohistochemical analysis of paraffinembedded rat liver tissue slide using 83696-3-RR (ICAM-1/CD54 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83696-3-PBS in a different storage buffer formulation.



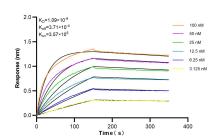
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded rat liver tissue using ICAM-1/CD54 antibody (83696-3-RR, Clone: 240725C2) at dilution of 1:500 and Coralite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83696-3-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP00678-1, RAT ICAM-1/CD54 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83696-3-PBS. Detection antibody: 83696-1-PBS. Standard: Eg1025. Range: 0.156-20 ng/mL



Cytometric bead array standard curve of MP00678-3, RAT I CAM-1/CD54 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83696-3-PBS. Detection antibody: 83696-2-PBS. Standard: Eg1025. Range: 0.156-20 ng/mL



Biolayer interferometry (BLL) kinetic assays of 83696-3-RR against Mouse ICAM-1/CD54 were performed. The affinity constant is 1.09 nM.