

For Research Use Only

Mouse CEACAM1/CD66a Recombinant antibody, PBS Only (Capture/Detector)

Catalog Number: 84409-4-PBS



Basic Information

Catalog Number: 84409-4-PBS	GenBank Accession Number: GeneID (NCBI): 26365	Purification Method: Protein A purification
Size: 100ug , Concentration: 1 mg/ml by Nanodrop;	UNIPROT ID: P31809-1	CloneNo.: 241856H5
Source: Rabbit	Full Name: carcinoembryonic antigen-related cell adhesion molecule 1	
Isotype: IgG	Calculated MW: 57 kDa	
Immunogen Catalog Number: EG1423	Observed MW: 120 kDa	

Applications

Tested Applications:
WB, IHC, IF-P, Cytometric bead array, Sandwich ELISA, Indirect ELISA, Sample test

Species Specificity:
mouse

Product Information

84409-4-PBS targets CEACAM1/CD66a as part of a matched antibody pair:

MP01297-2: 84409-4-PBS capture and 84409-3-PBS detection (validated in Cytometric bead array, Sandwich ELISA)

MP01297-3: 84409-2-PBS capture and 84409-4-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

CEACAM1, also known as CD66a or BGP (biliary glycoprotein), is a member of the carcinoembryonic antigen (CEA) family which belongs to the immunoglobulin superfamily of cell adhesion molecules (PMID: 16919437). CEACAMs play major roles in cell-cell and cell-ECM adhesion and have been implicated in the control of cell proliferation, angiogenesis, and tissue remodeling (PMID: 23021083). CEACAM1 is a transmembrane glycoprotein that is expressed on epithelial, endothelial, and immune cells (PMID: 30314283). CEACAM1 has been demonstrated to play a role in morphogenesis, apoptosis, angiogenesis, cell proliferation, cell motility, fibrosis, and immunity (PMID: 31604530).

Storage

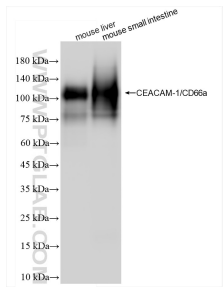
Storage:
Store at -80°C.

Storage Buffer:
PBS only, pH7.3

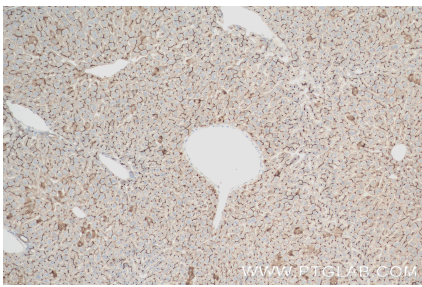
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

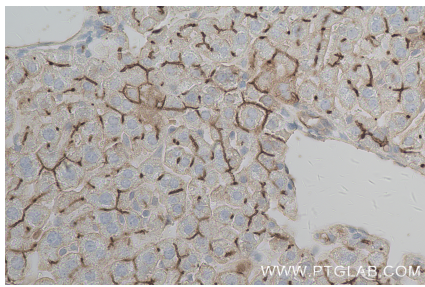
Selected Validation Data



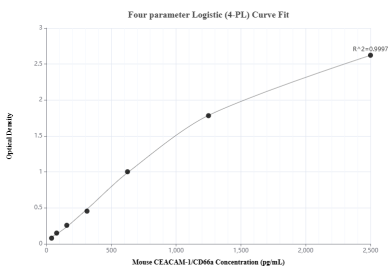
Various lysates were subjected to SDS PAGE followed by western blot with 84409-4-RR (CEACAM-1/CD66a antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84409-4-PBS in a different storage buffer formulation.



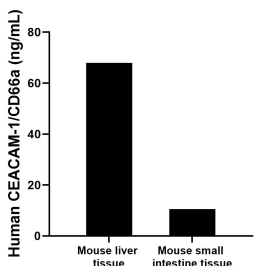
Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 84409-4-RR (CEACAM-1/CD66a antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84409-4-PBS in a different storage buffer formulation.



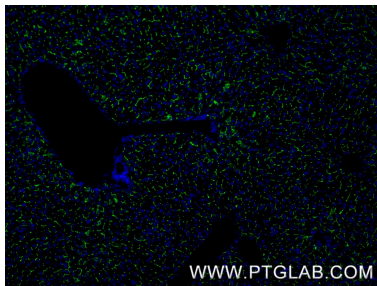
Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 84409-4-RR (CEACAM-1/CD66a antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84409-4-PBS in a different storage buffer formulation.



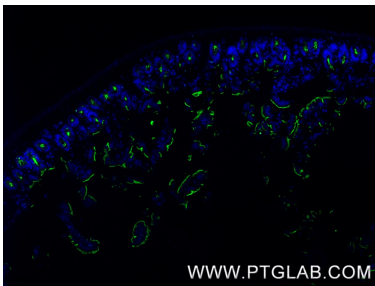
Sandwich ELISA standard curve of MP01297-2, Mouse CEACAM-1/CD66a Recombinant Matched Antibody Pair - PBS only. 84409-4-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Eg1423. 84409-3-PBS was HRP conjugated as the detection antibody. Range: 39.1-2500 pg/mL



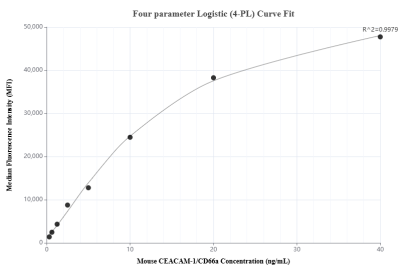
The mean CEACAM-1/CD66a concentration was determined to be 67.98 ng/mL in mouse liver tissue extract based on a 3.7 mg/mL extract load and 10.51 ng/mL in mouse small intestine tissue extract based on a 1.6 mg/mL extract load.



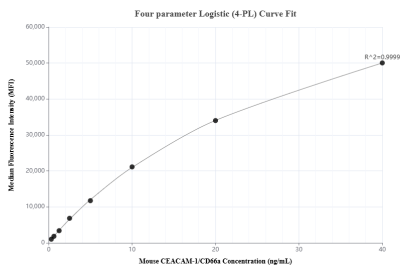
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse liver tissue using CEACAM-1/CD66a antibody (84409-4-RR, Clone: 241856H5) at dilution of 1:800 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84409-4-PBS in a different storage buffer formulation.



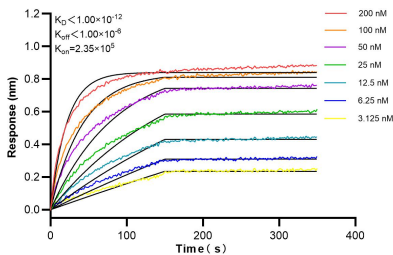
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse small intestine tissue using CEACAM-1/CD66a antibody (84409-4-RR, Clone: 241856H5) at dilution of 1:800 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84409-4-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP01297-2, MOUSE CEACAM-1/CD66a Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84409-4-PBS. Detection antibody: 84409-3-PBS. Standard: Eg1423. Range: 0.313-40 ng/mL



Cytometric bead array standard curve of MP01297-3, MOUSE CEACAM-1/CD66a Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84409-2-PBS. Detection antibody: 84409-4-PBS. Standard: Eg1423. Range: 0.313-40 ng/mL



Biolayer interferometry (BLI) kinetic assays of 84409-4-RR against Mouse CEACAM1/CD66a were performed. The affinity constant is below 1 pM.