abcam

Product datasheet

Anti-CD59 antibody [MEM-43/5] ab9183

★★★★★ 1 Abreviews 13 References 画像数 5

製品の概要

製品名	Anti-CD59 antibody [MEM-43/5]
製品の詳細	Mouse monoclonal [MEM-43/5] to CD59
由来種	Mouse
特異性	CD59 antigen (human). MEM-43/5 reacts with well defined epitope (around L33) and does not compete with MEM-43 and many other CD59 antibodies
アプリケーション	**適用あり:** ICC/IF, IP, IHC-P, Flow Cyt, WB
種交差性	**交差種:** Mouse, Human
免疫原	Tissue, cells or virus corresponding to Human CD59. Thymocytes and T lymphocytes
エピトープ	The antibody MEM-43/5 reacts with well defined epitope around L33 (see Bodian et al)
ポジティブ・コントロール	Flow cyt: blood Jeg3 cell line IF/ICC
特記事項	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
バッファー	pH: 7.40 Preservative: 0.097% Sodium azide Constituent: PBS
精製度	Protein A purified
特記事項（精製）	Purity >95% by SDS-PAGE.
ポリ/モノ	モノクローナル
クローン名	MEM-43/5

ミエローマ	unknown
アイソタイプ	IgG2b
軽鎖の種類	unknown

アプリケーション

The Abpromise guarantee **Abpromise保証は、次のテスト済みアプリケーションにおけるab9183の使用に適用されます**

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
ICC/IF		Use a concentration of 5 µg/ml.
IP		Use at an assay dependent concentration.
IHC-P	★★★★★ (1)	Use a concentration of 5 µg/ml.
Flow Cyt		Use a concentration of 0.5 - 4 µg/ml. **ab170192** - Mouse monoclonal IgG2b, is suitable for use as an isotype control with this antibody.
WB		Use at an assay dependent concentration. Predicted molecular weight: 14 kDa. CD59 is GPI-anchored, so we recommend to use a laurylmatoside based lysis buffer or triton base buffer (see Bodian et al; 1% Triton X-100, 1 Âµg/ml leupeptin, 1 Âµg/ml pepstatin A and 1 mM phenlymethylsulphonyl fluoride in PBS), not NP40.

ターゲット情報

機能

Potent inhibitor of the complement membrane attack complex (MAC) action. Acts by binding to the C8 and/or C9 complements of the assembling MAC, thereby preventing incorporation of the multiple copies of C9 required for complete formation of the osmolytic pore. This inhibitor appears to be species-specific. Involved in signal transduction for T-cell activation complexed to a protein tyrosine kinase.
The soluble form from urine retains its specific complement binding activity, but exhibits greatly reduced ability to inhibit MAC assembly on cell membranes.

関連疾患

Defects in CD59 are the cause of CD59 deficiency (CD59D) [MIM:612300].

配列類似性

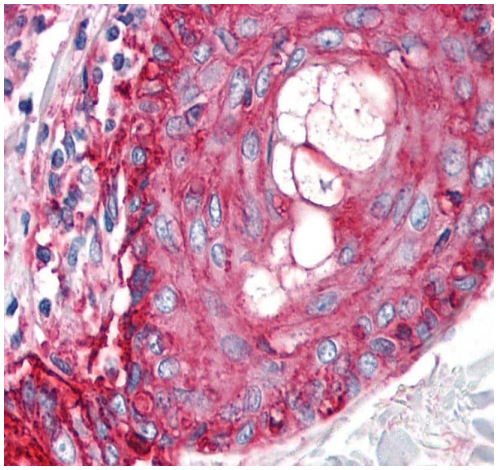
Contains 1 UPAR/Ly6 domain.

翻訳後修飾

N- and O-glycosylated. The N-glycosylation mainly consists of a family of biantennary complex-type structures with and without lactosamine extensions and outer arm fucose residues. Also significant amounts of triantennary complexes (22%). Variable sialylation also present in the Asn-43 oligosaccharide. The predominant O-glycans are mono-sialylated forms of the disaccharide, Gal-beta-1,3GalNAc, and their sites of attachment are probably on Thr-76 and Thr-77. The GPI-anchor of soluble urinary CD59 has no inositol-associated phospholipid, but is composed of seven different GPI-anchor variants of one or more monosaccharide units. Major variants contain sialic acid, mannose and glucosamine Sialic acid linked to an N-acetylhexosamine-galactose arm is present in two variants.

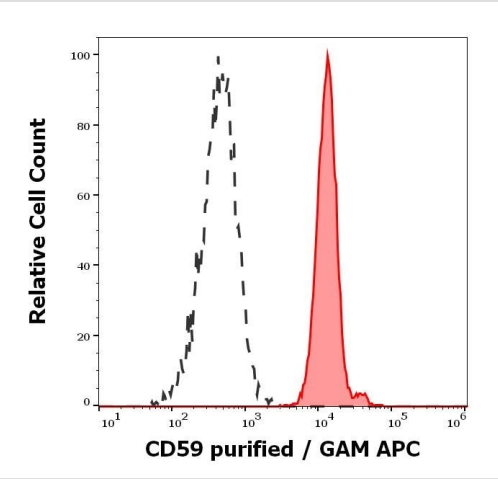
	Glycated. Glycation is found in diabetic subjects, but only at minimal levels in nondiabetic subjects. Glycated CD59 lacks MAC-inhibitory function and confers to vascular complications of diabetes.
細胞内局在	Cell membrane. Secreted. Soluble form found in a number of tissues.

画像



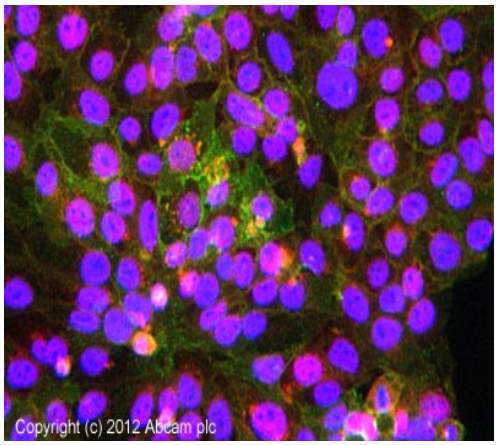
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD59 antibody [MEM-43/5] (ab9183)

Immunohistochemistry parafin embedded sections staining of huam skin tissue using ab9183.



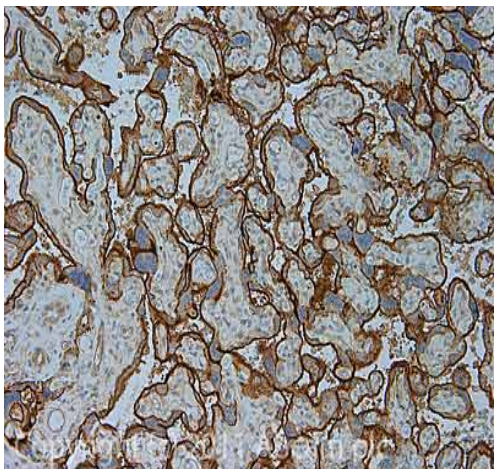
Flow Cytometry - Anti-CD59 antibody [MEM-43/5] (ab9183)

Flow cytometric analysis of Human Peripheral Blood cells labelling CD59 with ab9183 at 0.6 ug/ml showing separation of human neutrophil granulocytes (red-filled) from human CD59 negative blood debris (black-dashed).



Immunocytochemistry/ Immunofluorescence - Anti-CD59 antibody [MEM-43/5] (ab9183)

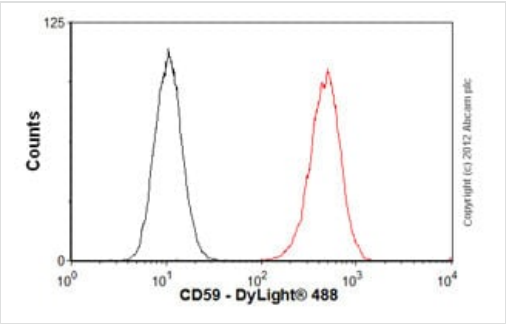
ICC/IF image of ab9183 stained Jeg3 cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab9183, 5µg/ml) overnight at +4°C. The secondary antibody (green) was **ab96879**, DyLight® 488 goat anti-mouse IgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD59 antibody [MEM-43/5] (ab9183)

IHC image of ab9183 staining CD59 in Human normal placenta formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with EDTA (pH9, epitope retrieval solution 2) for 20 mins. The section was then incubated with ab9183, 5µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Flow Cytometry - Anti-CD59 antibody [MEM-43/5] (ab9183)

Overlay histogram showing Jurkat cells stained with ab9183 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab9183, 1µg/1x10^6 cells) for 30 min at 22ºC. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (**ab96879**) at 1/500 dilution for 30 min at 22ºC. Isotype control antibody (black line) was mouse IgG2b [PLPV219] (**ab91366**, 2µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in Jurkat cells fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.