

## Product datasheet

# Anti-CD59 antibody [MEM-43] ab59475

★★★★★ 1 Abreviews 1 References 画像数 3

### 製品の概要

製品名	Anti-CD59 antibody [MEM-43]
製品の詳細	Mouse monoclonal [MEM-43] to CD59
由来種	Mouse
アプリケーション	<b>適用あり:</b> Flow Cyt, ICC/IF, IHC-Fr, IHC-P, ELISA
種交差性	<b>交差種:</b> Human
免疫原	Tissue/ cell preparation, Thymocytes and T lymphocytes.
ポジティブ・コントロール	IHC-P: human placenta FFPE tissue sections. IF/ICC: Jeg3 cell line.

### 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	Preservative: None Constituents: PBS
精製度	Ion Exchange Chromatography
特記事項(精製)	ab59475 is sterile-filtered through 0.22 µm and treated to remove endotoxins.
ポリ/モノ	モノクローナル
クローン名	MEM-43
アイソタイプ	IgG2a

### アプリケーション

Our [Abpromise guarantee](#) covers the use of **ab59475** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

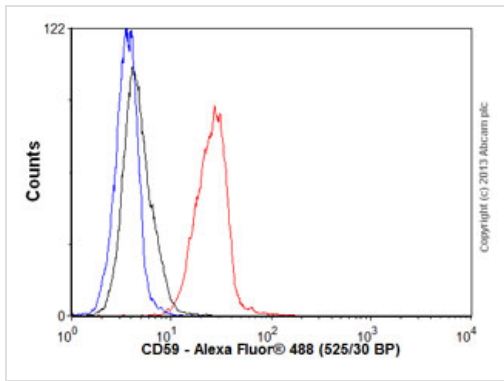
アプリケーション	Abreviews	特記事項

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Flow Cyt		Use 0.01-0.1 µg for 10 <sup>6</sup> cells. <a href="#">ab170191</a> - Mouse monoclonal IgG2a, is suitable for use as an isotype control with this antibody.
ICC/IF	★★★★★	Use at an assay dependent concentration.
IHC-Fr		Use at an assay dependent concentration.
IHC-P		Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ELISA		Use a concentration of 7 µg/ml. PubMed: 19454698

## ターゲット情報

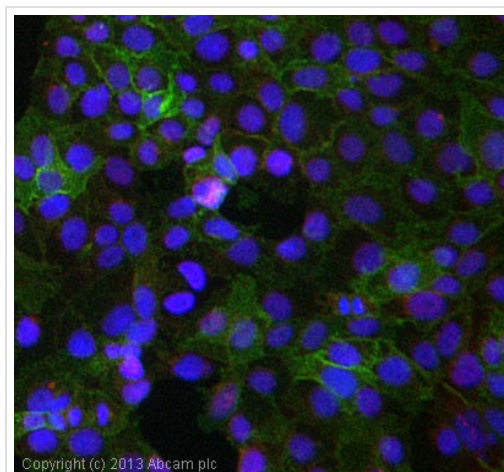
<b>機能</b>	<p>Potent inhibitor of the complement membrane attack complex (MAC) action. Acts by binding to the C8 and/or C9 complements of the assembling MAC, thereby preventing incorporation of the multiple copies of C9 required for complete formation of the osmolytic pore. This inhibitor appears to be species-specific. Involved in signal transduction for T-cell activation complexed to a protein tyrosine kinase.</p> <p>The soluble form from urine retains its specific complement binding activity, but exhibits greatly reduced ability to inhibit MAC assembly on cell membranes.</p>
<b>関連疾患</b>	Defects in CD59 are the cause of CD59 deficiency (CD59D) [MIM:612300].
<b>配列類似性</b>	Contains 1 UPAR/Ly6 domain.
<b>翻訳後修飾</b>	<p>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.</p> <p>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.</p>
<b>細胞内局在</b>	Cell membrane. Secreted. Soluble form found in a number of tissues.

## 画像



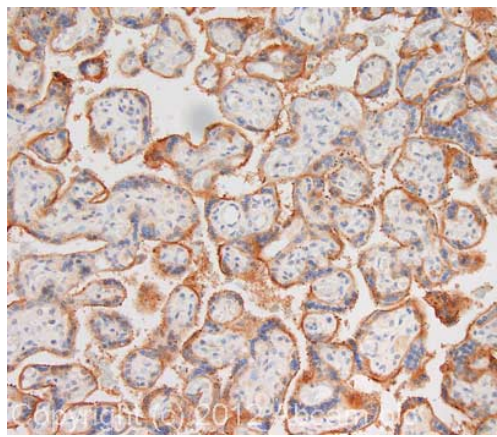
Flow Cytometry - Anti-CD59 antibody [MEM-43] (ab59475)

Human peripheral blood lymphocytes stained with ab59475 (red line). Human whole blood was processed using a modified protocol based on Chow *et al*, 2005 (PMID: 16080188). In brief, human whole blood was fixed in 4% formaldehyde (methanol-free) for 10 min at 22°C. Red blood cells were then lysed by the addition of Triton X-100 (final concentration - 0.1%) for 15 min at 37°C. For experimentation, cells were treated with 50% methanol (-20°C) for 15 min at 4°C. Cells were then incubated with the antibody (ab59475, 0.01µg/1x10<sup>6</sup> cells) for 30 min at 4°C. The secondary antibody used was Alexa Fluor® 488 goat anti-mouse IgG (H&L) (ab150113) at 1/2000 dilution for 30 min at 4°C. Isotype control antibody (black line) was mouse IgG2a [ICIGG2A] (ab91361, 0.1µg/1x10<sup>6</sup> cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >30,000 total events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. Gating strategy - peripheral blood lymphocytes.



Immunocytochemistry/ Immunofluorescence - Anti-CD59 antibody [MEM-43] (ab59475)

ICC/IF image of ab59475 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 (ab59475, 10µg/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] (ab59475)

IHC image of CD59 staining in human 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 sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab59475, 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.

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