

Product datasheet

Anti-CD59 antibody [MEM-43] ab9182

★★★★★ [2 Abreviews](#) [23 References](#) [2 Images](#)

Overview

Product name	Anti-CD59 antibody [MEM-43]
Description	Mouse monoclonal [MEM-43] to CD59
Host species	Mouse
Specificity	CD59 antigen (human). MEM-43 identified CD59 as the new cluster on 4th HLDA Workshop. MEM-43 reacts with well defined epitope (W40, R53).
Tested applications	Suitable for: IP, IHC-Fr, IHC, ICC/IF, Flow Cyt, WB, IHC-P
Species reactivity	Reacts with: Human
Immunogen	Tissue, cells or virus corresponding to Human CD59. Thymocytes and T lymphocytes
Positive control	ICC/IF: Human fibrosarcoma cells. Flow Cyt: HT1080 cells. IHC: human placenta tissue
General notes	<p>When originally tested in WB, SDS was included in the sample buffer, however, feedback from one researcher has shown that it is best to omit SDS from the sample buffer.</p> <p>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.</p> <p>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</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Do Not Freeze.
Storage buffer	pH: 7.40 Preservative: 0.097% Sodium azide Constituent: PBS
Purity	Protein A purified
Purification notes	Purity >95% by SDS-PAGE.
Clonality	Monoclonal

Clone number	MEM-43
Myeloma	unknown
Isotype	IgG2a
Light chain type	unknown

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab9182 in the following tested applications.

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

Application	Abreviews	Notes
IP		Use at an assay dependent concentration.
IHC-Fr		Use at an assay dependent concentration.
IHC		Use a concentration of 10 µg/ml.
ICC/IF	★★★★★ (1)	Use at an assay dependent concentration. PubMed: 17911601
Flow Cyt	★★★★★ (1)	Use a concentration of 0.5 - 4 µg/ml. ab170191 - Mouse monoclonal IgG2a, is suitable for use as an isotype control with this antibody.
WB		Use at an assay dependent concentration. Predicted molecular weight: 14 kDa. Use under non-reducing conditions.
IHC-P		Use at an assay dependent concentration.

Target

Function	<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>
Involvement in disease	Defects in CD59 are the cause of CD59 deficiency (CD59D) [MIM:612300].
Sequence similarities	Contains 1 UPAR/Ly6 domain.
Post-translational modifications	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

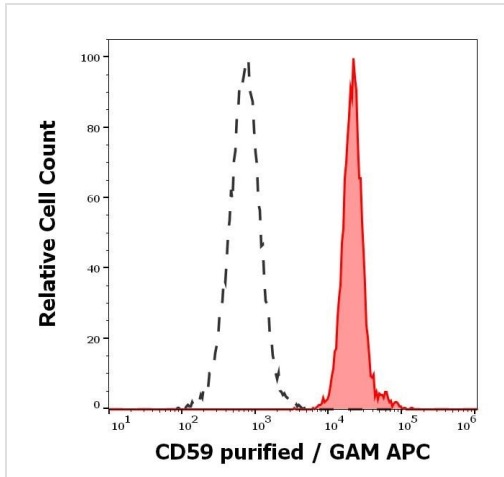
arm is present in two variants.

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.

Cellular localization

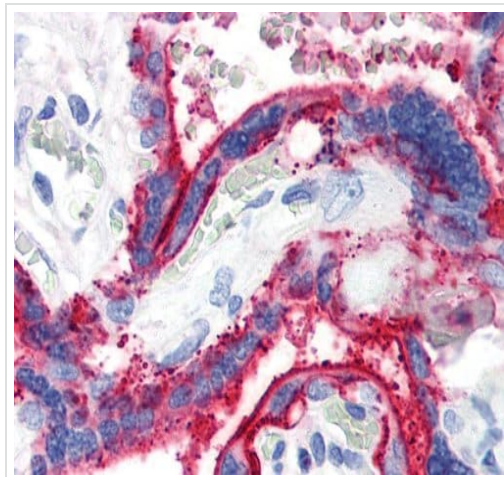
Cell membrane. Secreted. Soluble form found in a number of tissues.

Images



Flow cytometric analysis of Human Peripheral Blood cells labelling CD59 with ab9182 at 0.3 ug/ml showing separation of human neutrophil granulocytes (red-filled) from human CD59 negative blood debris (black-dashed).

Flow Cytometry - Anti-CD59 antibody [MEM-43] (ab9182)



Immunohistochemistry paraffin embedded sections staining of human placenta tissue using ab9182 with a concentration of 10µg / ml

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD59 antibody [MEM-43] (ab9182)

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