

Product datasheet

Anti-CD59 antibody [MACIF/629] ab234013

[2 Images](#)

Overview

Product name	Anti-CD59 antibody [MACIF/629]
Description	Mouse monoclonal [MACIF/629] to CD59
Host species	Mouse
Tested applications	Suitable for: IHC-P
Species reactivity	Reacts with: Human
Immunogen	Recombinant full length protein corresponding to Human CD59 aa 1 to the C-terminus. Database link: P13987 Run BLAST with Run BLAST with
Positive control	IHC-P: Human tongue and tonsil tissues.

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 long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.05% Sodium azide Constituents: PBS, 0.05% BSA
Purity	Protein G purified
Purification notes	Purified from Bioreactor Concentrate.
Clonality	Monoclonal
Clone number	MACIF/629
Isotype	IgG1
Light chain type	kappa

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab234013 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
IHC-P		Use a concentration of 1 - 2 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Primary incubation for 30 minutes at room temperature.

Target

Function

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.

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

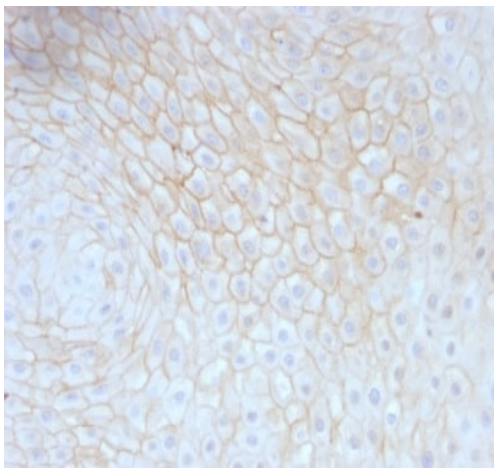
N- and O-glycosylated. The N-glycosylation mainly consists of a family of biantennary complex-type structures with and without lactosamine extensions and outer arm fucose residues. Also significant amounts of triantennary complexes (22%). Variable sialylation also present in the Asn-43 oligosaccharide. 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

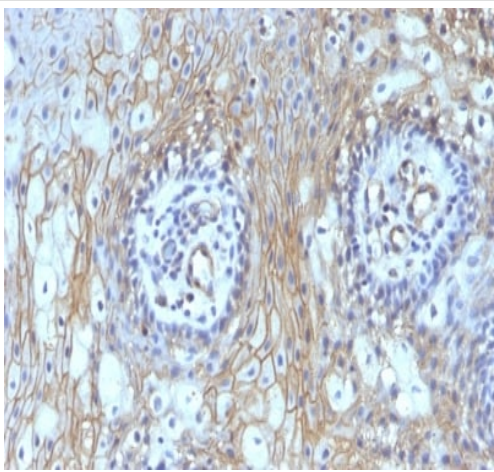
Cell membrane. Secreted. Soluble form found in a number of tissues.

Images



Formalin-fixed, paraffin-embedded human tonsil tissue stained for CD59 using ab234013 at 2 µg/ml in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD59 antibody
[MACIF/629] (ab234013)



Formalin-fixed, paraffin-embedded human tongue tissue stained for CD59 using ab234013 at 2 µg/ml in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD59 antibody
[MACIF/629] (ab234013)

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