Datasheet for ABIN7200672

Recombinant anti-C5 (Eculizumab Biosimilar) antibody

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Overview

Quantity:	1 mg
Target:	C5 (Eculizumab Biosimilar)
Reactivity:	Human
Host:	Mouse
Antibody Type:	Recombinant Antibody
Clonality:	Monoclonal
Conjugate:	This C5 (Eculizumab Biosimilar) antibody is un-conjugated
Application:	In vivo Studies (in vivo), Flow Cytometry (FACS)

Product Details

Purpose:	Eculizumab Biosimilar, Human C5 Monoclonal Antibody
Immunogen:	The monoclonal antibody Eculizumab biosimilar was produced in the Eculizumab biosimilar CHO stable cell line.
Isotype:	IgG2, IgG4, kappa
Specificity:	The monoclonal antibody Eculizumab biosimilar specifically binds to the human C5, the terminal complement component 5.
Characteristics:	Recombinant Humanized IgG2 Monoclonal Antibody.
Purification:	Protein A affinity column
Purity:	> 95% by SDS-PAGE under reducing conditions and HPLC.
Sterility:	0.2 µm filtered

Product Details

Endotoxin Level:	< 1 EU per 1 mg of the protein by the LAL method.

Target Details

Target:	C5 (Eculizumab Biosimilar)
Target Type:	Biosimilar
Background:	Eculizumab, a recombinant humanized anti-C5 (the terminal Complement component 5) monoclonal antibody, selectively targets and inhibits the terminal portion of the complement cascade. Eculizumab is a first-in-class terminal complement inhibitor to treat paroxysmal nocturnal hemoglobinuria (PNH) with excessive destruction of red blood cells (hemolysis). Eculizumab is also the first agent to treat atypical hemolytic uremic syndrome (aHUS) with abnormal blood clots to form in small blood vessels throughout the body, leading to kidney failure, damage to other vital organs and premature death. The complement immune system destroys and removes foreign particles by the complement cascade triggered by foreign particles. The complement proteins activiated in order create holes or pores in the invading organisms, leading to their destruction. The complement immune system in patients can also destroy healthy cells and tissue, resulting in excessive destruction of red blood cells (hemolysis) or abnormal blood clots to form in small blood vessels throughout the body. When activated, C5 at a late stage in the complement cascade is involved in activating host cells, thereby attracting pro-inflammatory immune cells, while also destroying cells by triggering pore formation. Eculizumab specifically binds to C5 and inhibits the cleavage of C5 to C5a (a potent anaphylatoxin with prothrombotic and proinflammatory properties) and C5b by the C5 convertase, preventing the generation of the terminal complement complex C5b-9 (which also has prothrombotic and proinflammatory effects). Both C5a and C5b-9 cause the terminal complement-mediated events that are characteristic of PNH and aHUS. By doing so, the normal, disease-preventing functions of proximal complement system are largely preserved, while the properties of C5 that promote inflammation and cell destruction are impeded.

Application Details

Application Notes:	ELISA, functional assays such as bioanalytical PK and ADA assays.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 mg/mL
Buffer:	PBS, pH 7.4, no stabilizers or preservatives.
Preservative:	Without preservative
Handling Advice:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.
Storage:	-20 °C
Storage Comment:	12 months from date of receipt, -20 to -70°C as supplied. 1 month from date of receipt, 2 to 8°C as supplied.
Expiry Date:	12 months