

Datasheet for ABIN7200670

Recombinant anti-CTLA-4 (Tremelimumab Biosimilar) antibody



[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	CTLA-4 (Tremelimumab Biosimilar)
Reactivity:	Human
Host:	Mouse
Antibody Type:	Recombinant Antibody
Clonality:	Monoclonal
Conjugate:	This CTLA-4 (Tremelimumab Biosimilar) antibody is un-conjugated
Application:	Flow Cytometry (FACS), In vivo Studies (in vivo)

Product Details

Purpose:	Tremelimumab Biosimilar, Human CTLA-4 monoclonal antibody
Immunogen:	The anti-human CTLA-4 monoclonal antibody tremelimumab biosimilar (research grade) was produced in mammalian cells.
Isotype:	IgG2, kappa
Specificity:	The in vivo grade tremelimumab biosimilar specifically binds to the human protein receptor CD152 / CTLA4.
Characteristics:	Recombinant Chimeric 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: CTLA-4 (Tremelimumab Biosimilar)

Target Type: Biosimilar

Background: What is Tremelimumab biosimilar research grade? Tremelimumab (formerly ticilimumab) is a fully human monoclonal antibody against CTLA-4 / CD152. It is an immune checkpoint blocker. Unlike Ipilimumab (another fully human anti-CTLA-4 / CD152 monoclonal antibody), which is an IgG1 isotype, tremelimumab is an IgG2 isotype. Tremelimumab Biosimilar uses the same protein sequences as the therapeutic antibody tremelimumab.

Tremelimumab aims to stimulate an immune system attack on tumors. Cytotoxic T lymphocytes (CTLs) can recognize and destroy cancer cells. However, there is also an inhibitory mechanism (immune checkpoint) that interrupts this destruction. Tremelimumab turns off this inhibitory mechanism and allows CTLs to continue to destroy the cancer cells. This is immune checkpoint blockade.

Tremelimumab binds to the protein CTLA-4 / CD152, which is expressed on the surface of activated T lymphocytes and inhibits the killing of cancer cells. Tremelimumab blocks the binding of the antigen-presenting cell ligands B7.1 and B7.2 to CTLA-4 / CD152, resulting in inhibition of B7-CTLA-4-mediated downregulation of T-cell activation; subsequently, B7.1 or B7.2 may interact with another T-cell surface receptor protein, CD28, resulting in a B7-CD28-mediated T-cell activation unopposed by B7-CTLA-4-mediated inhibition.

Application Details

Application Notes: ELISA, neutralization, in vivo functional assays such as bioanalytical PK and ADA assays, and those in vitro and in vivo assays for studying biological pathways affected by tremelimumab.

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 1 mg/mL

Buffer: PBS, pH 7.4, no stabilizers or preservatives.

Handling

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