

FITC-Compatible Human CD19 Protein

Cat. No. CD1-HM119F

Description

Source	FITC-Compatible Human CD19 Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Pro20-Lys291.
Accession	P15391-1
Molecular Weight	The protein has a predicted MW of 60.1 kDa. Due to glycosylation, the protein migrates to 68-72 kDa based on Bis-Tris PAGE result.
Wavelength	Excitation Wavelength: 490 nm Emission Wavelength: 520 nm
Endotoxin	Less than 1 EU per µg by the LAL method.
Purity	>95% as determined by Bis-Tris PAGE >95% as determined by HPLC

Formulation and Storage

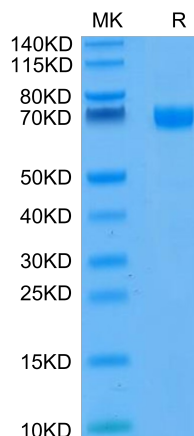
Formulation	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

CD19 is a B-lineage-specific transmembrane glycoprotein, the expression of which is maintained on more than 95% B-cell malignancies. This strict lineage restriction makes CD19 an ideal target for immune therapies using chimeric antigen receptors (CARs). T cells engineered to express a chimeric antigen receptor (CAR) against CD19 have recently been FDA approved for the treatment of relapsed or refractory large B-cell lymphoma. Despite the success and curative potential of CD19 CAR T cells, several reports describing disease relapse due to antigen loss are now emerging.

Assay Data

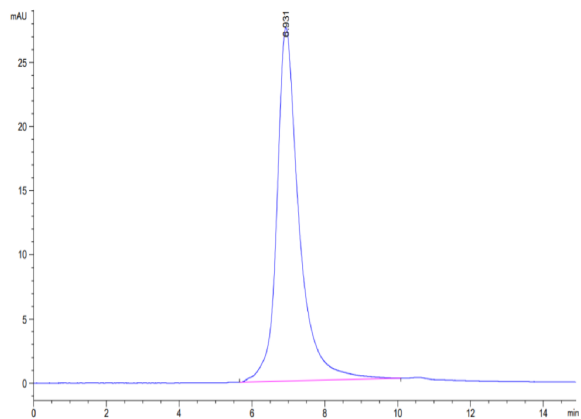
Bis-Tris PAGE



FITC-Compatible Human CD19 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

Assay Data



The purity of FITC-Compatible Human CD19 is greater than 95% as determined by SEC-HPLC.

FITC-Compatible Human CD19 Protein

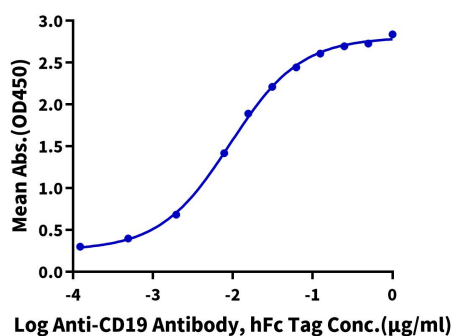
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Assay Data

ELISA Data

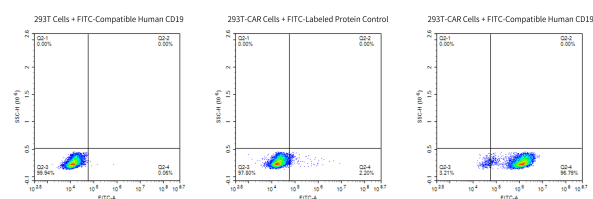
FITC-Compatible Human CD19, His Tag ELISA

0.2µg FITC-Compatible Human CD19, His Tag Per Well



Immobilized FITC-Compatible Human CD19, His Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Anti-CD19 Antibody, hFc Tag with the EC50 of 9.3ng/ml determined by ELISA (QC Test).

FACS Data



FACS Analysis of Anti-CD19 CAR expression. 293T cells were transfected with anti-CD19-scFv and His tag. Cells were incubated with 10 µg/ml FITC-compatible Human CD19, His Tag and FITC-labeled protein control. Non-transfected 293T cells and FITC-labeled protein control were used as negative control.