Monoclonal Anti-SN38 Antibody, Mouse IgG1 (MALS verified)

Catalog # SN8-M685

Source

Mouse Anti-SN38 Antibody, Mouse IgG1 is recombinantly produced from human 293 cells (HEK293).

Isotype

Mouse IgG1/kappa

Specificity

Specifically recognizes the target-SN38.

Application

PK, PD, Immunoassay and ELISA

Purity

>90% as determined by SDS-PAGE.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

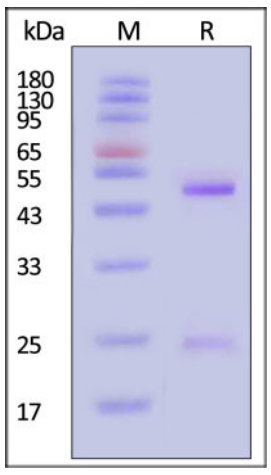
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

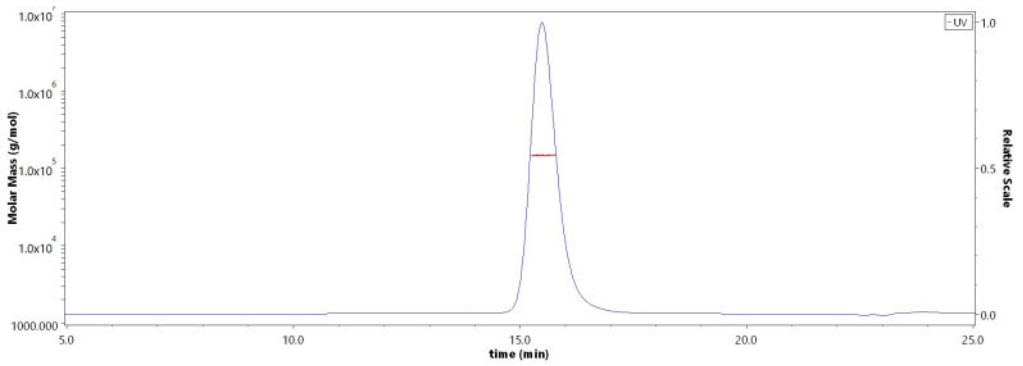
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



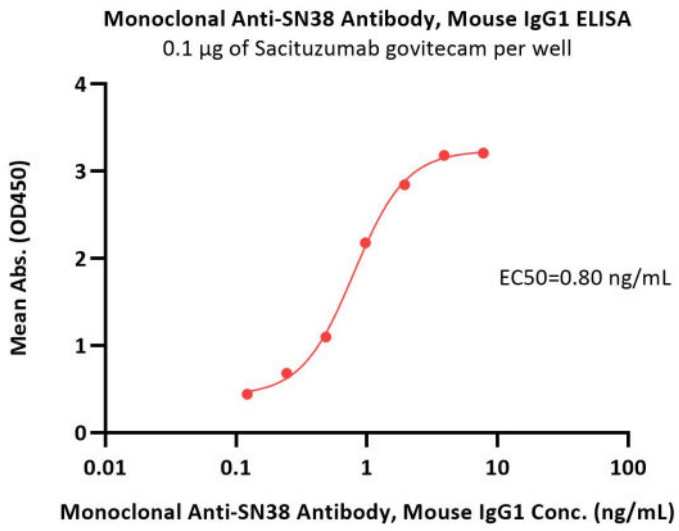
Monoclonal Anti-SN38 Antibody, Mouse IgG1 on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS



The purity of Monoclonal Anti-SN38 Antibody, Mouse IgG1 (Cat. No. SN8-M685) is more than 0.95 and the molecular weight of this protein is around 130-160 kDa verified by SEC-MALS.
Report

Bioactivity-Elisa



Immobilized Sacituzumab govitecam (Cat. No. HY-132254) at 1 μg/mL (100 μL/well) can bind Monoclonal Anti-SN38 Antibody, Mouse IgG1 (Cat. No. SN8-M685) with a linear range of 0.12-0.98 ng/mL (QC tested).

Background

SN-38 is an antineoplastic drug. It is the active metabolite of irinotecan (an analog of camptothecin - a topoisomerase I inhibitor) but has 1000 times more activity than irinotecan itself. In vitro cytotoxicity assays show that the potency of SN-38 relative to irinotecan varies from 2- to 2000-fold. SN38 is formed via hydrolysis of irinotecan by carboxylesterases and metabolized via glucuronidation by UGT1A1. The variant of UGT1A1 in ~10% of Caucasians which leads to poor metabolism of SN-38 predicts irinotecan toxicity, as it is then less easily excreted from the body in its SN-38 glucuronide form. SN-38 and its glucuronide are lost into the bile and intestines. It can cause the symptoms of diarrhoea and myelosuppression experienced by ~25% of the patients administered irinotecan.

Clinical and Translational Updates