Anti-SN38 Antibody [PSH0-05]

HA721258

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Species independent
Applications:	ELISA, WB
Clone number:	PSH0-05

Description: 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.

Immunogen: SN38-OVA

Recommended Dilutions:

ELISA	1:10,000
WB	1:1,000

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

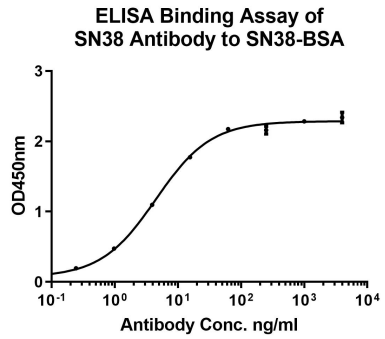

Fig1: Indirect ELISA analysis of SN38 was performed by coating wells of a 96-well plate with 50 µl per well of SN38-BSA diluted in carbonate/bicarbonate buffer, at a concentration of 1 µg/mL overnight at 4℃. Wells of the plate were washed, blocked with 1%BSA blocking buffer, and incubated with 100 µl per well of SN38 monoclonal antibody (HA721258) serial diluted starting from a concentration of 20ug/ml for 1 hours at room temperature. The plate was washed and incubated with 50 µl per well of an HRP-conjugated goat anti-Rabbit IgG secondary antibody at a dilution of 1:15,000 for one hour at room temperature. Detection was performed using an Ultra TMB Substrate for 10 minutes at room temperature in the dark. The reaction was stopped with sulfuric acid and absorbances were read on a spectrophotometer at 450 nm.

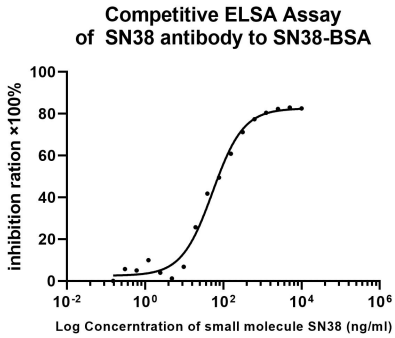

Fig2: Competitive ELISA analysis of SN38 was performed by coating wells of a 96-well plate with 50 µl per well of SN38-BSA diluted in carbonate/bicarbonate buffer, at a concentration of 1 µg/mL overnight at 4℃. Wells of the plate were washed, blocked with 1%BSA blocking buffer, and incubated with 100 µl per well of SN38 monoclonal antibody (HA721258) at concentration of 1 µg/mL with serial diluted SN38 starting from a concentration of 10ug/ml for 1 hours at room temperature. The plate was washed and incubated with 50 µl per well of an HRP-conjugated goat anti-Rabbit IgG secondary antibody at a dilution of 1:15,000 for one hour at room temperature. Detection was performed using an Ultra TMB Substrate for 10 minutes at room temperature in the dark. The reaction was stopped with sulfuric acid and absorbances were read on a spectrophotometer at 450 nm.

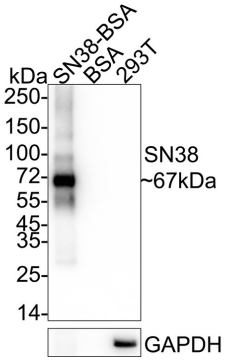

Fig3: Western blot analysis of SN38 on different lysates with Rabbit anti-SN38 antibody (HA721258) at 1/1,000 dilution.

Lane 1: SN38-BSA (50 ng/Lane)
Lane 2: BSA (negative) (50 ng/Lane)
Lane 3: 293T cell lysate (negative) (20 µg/Lane)

Exposure time: 2 seconds; ECL: K1801;
4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA721258) at 1/1,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

Background References

1. O'Dwyer PJ, Catalano RB (October 2006). "Uridine diphosphate glucuronosyltransferase (UGT) 1A1 and irinotecan: practical pharmacogenomics arrives in cancer therapy". J. Clin. Oncol. 24 (28): 4534–8.