TU21259

SN38 Antibody

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☐ 50ul;100ul;1000ul;

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. SN-38 causes the strongest inhibition of DNA topoisomerase I, followed by CPT and then CPT-11. CPT-11 dose dependently shifts the position of relaxed DNA in the direction of nicked DNA, but SN-38 and CPT shows no effect on the position of relaxed DNA. SN-38 dose-dependently and time-dependently inhibit DNA synthesis. Respective IC50 values of SN-38, in DNA synthesis is 0.077 μM. The inhibitory effect of SN-38 on RNA synthesis is less than that on DNA synthesis and it does not inhibit protein synthesis. SN-38 caused frequent DNA single-strand breaks in P388 cells.

Source： Rabbit

Clonality： Recombinant Rabbit monoclonal Antibody

Concentration： 1 mg/mL.

Application： ELISA

Image：

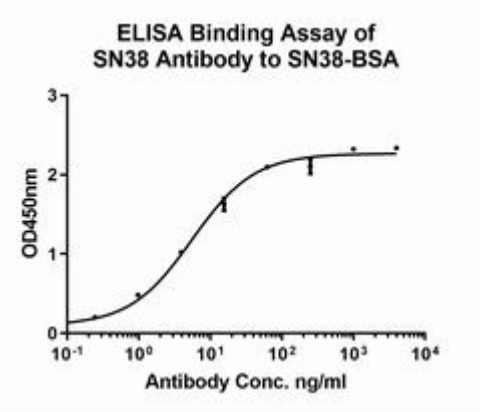

Fig1:Indirect ELISA analysis of SN38 was performed by coating wells of a 96-well plate with 50 μl per well of SN38-BSA diluted in carbonate/bicarbonate buffer, at a concentration of 1 μg/mL overnight at 4℃. Wells of the plate were washed, blocked with 1%BSA blocking buffer, and incubated with 100 μl per well of SN38 monoclonal antibody 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.

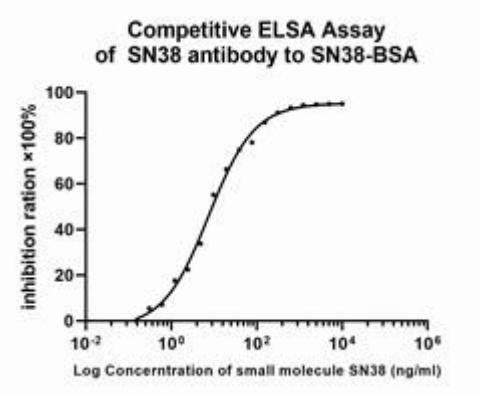

Fig2:Competitive ELISA analysis of SN38 was performed by coating wells of a 96-well plate with 50 µl per well of SN38-BSA diluted in carbonate/bicarbonate buffer, at a concentration of 1 µg/mL overnight at 4℃. Wells of the plate were washed, blocked with 1%BSA blocking buffer, and incubated with 100 µl per well of SN38 monoclonal antibody 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.

Storage：

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