

Anti-SMCC Antibody [PSH06-06]

HA722505



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Species independent
Applications:	ELISA
Clone number:	PSH06-06

Description: Succinimidyl 4-(N-maleimidomethyl)cyclohexane-1-carboxylate (SMCC) is a heterobifunctional amine-to-sulfhydryl crosslinker, which contains two reactive groups at opposite ends: N-hydroxysuccinimide-ester and maleimide, reactive with amines and thiols respectively. SMCC is often used in bioconjugation to link proteins with other functional entities (fluorescent dyes, tracers, nanoparticles, cytotoxic agents). For example, a targeted anticancer agent – trastuzumab emtansine (antibody-drug conjugate containing an antibody trastuzumab chemically linked to a highly potent drug DM-1) – is prepared using SMCC reagent. In a pharmacokinetics study, the CX-DM1-containing ADCs exhibited stability comparable to that of SMCC-DM1-containing ADCs. SMCC is a classic noncleavable linker that has been employed in Kadcyra. However, SMCC-based conjugates are still limited due to their instability in the circulatory system and hydrophobic properties.

Immunogen: Fusion protein With SMCC.

Recommended Dilutions:
ELISA 1:20,000

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

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

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

 华安生物
HUABIO
www.huabio.cn

Images

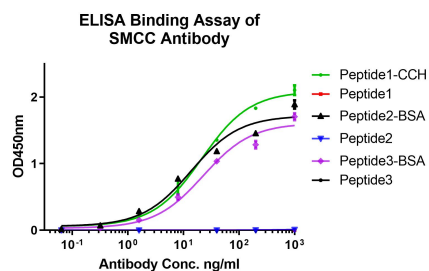


Fig1: Indirect ELISA analysis of SMCC was performed by coating wells of a 96-well plate with 50 μ L per well of different SMCC conjugations diluted in carbonate/bicarbonate buffer, at a concentration of 1 μ g/mL overnight at 4 $^{\circ}$ C. Wells of the plate were washed, blocked with 1% BSA blocking buffer for 1 hour at 37 $^{\circ}$ C, and incubated with 50 μ L per well of SMCC monoclonal antibody serial diluted starting from a concentration of 1 μ g/mL for 45 minutes at 37 $^{\circ}$ C. The plate was washed and incubated with 50 μ L per well of an HRP-conjugated goat anti-rabbit IgG secondary antibody at a dilution of 1/80,000 for 30 minutes at 37 $^{\circ}$ C. Detection was performed using an Ultra TMB Substrate for 10 minutes at 37 $^{\circ}$ C in the dark. The reaction was stopped with sulfuric acid and absorbances were read on a spectrophotometer at 450 nm.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Lambert J.M., Chari R.V. Ado-trastuzumab emtansine (T-DM1): an antibody-drug conjugate (ADC) for HER2-positive breast cancer. *J Med Chem.* 2014;57:6949–6964
2. Dovgan I., Kolodych S., Koniev O., Wagner A. 2-(Maleimidomethyl)-1,3-dioxanes (MD): a serum-stable self-hydrolysable hydrophilic alternative to classical maleimide conjugation. *Sci Rep.* 2016;6:30835

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

华安生物
HUABIO
www.huabio.cn