Monoclonal Anti-Payload PBD Antibody, Rabbit IgG (M1D08) (MALS verified)

Catalog # PAD-MY2221

Specificity

Specifically recognizes PBD.

Source

Monoclonal Anti-Payload PBD Antibody, Rabbit IgG (M1D08) is a Rabbit monoclonal antibody recombinantly expressed from HEK293 cells.

Clone

M1D08

Isotype

Rabbit IgG | Rabbit Kappa

Conjugate

Unconjugated

Immunogen

PBD-BSA.

Application

Application	Recommended Usage
ELISA	0.06-10000 ng/mL

Purification

Protein A purified / Protein G purified

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

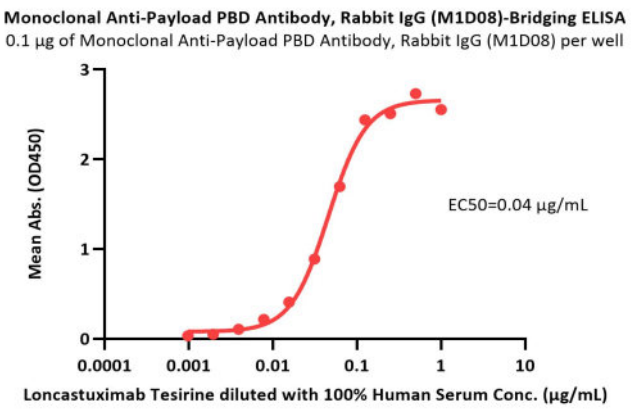
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

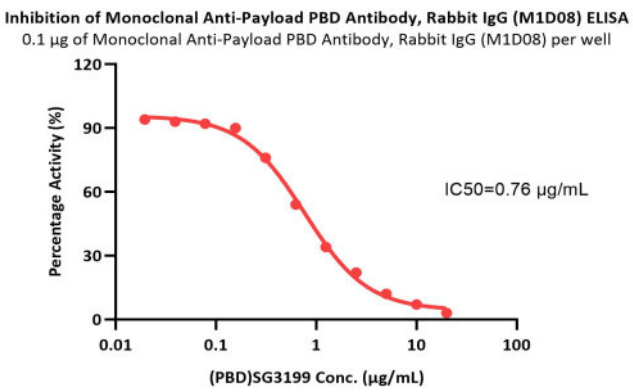
This product is stable after storage at:

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

Bioactivity-ELISA

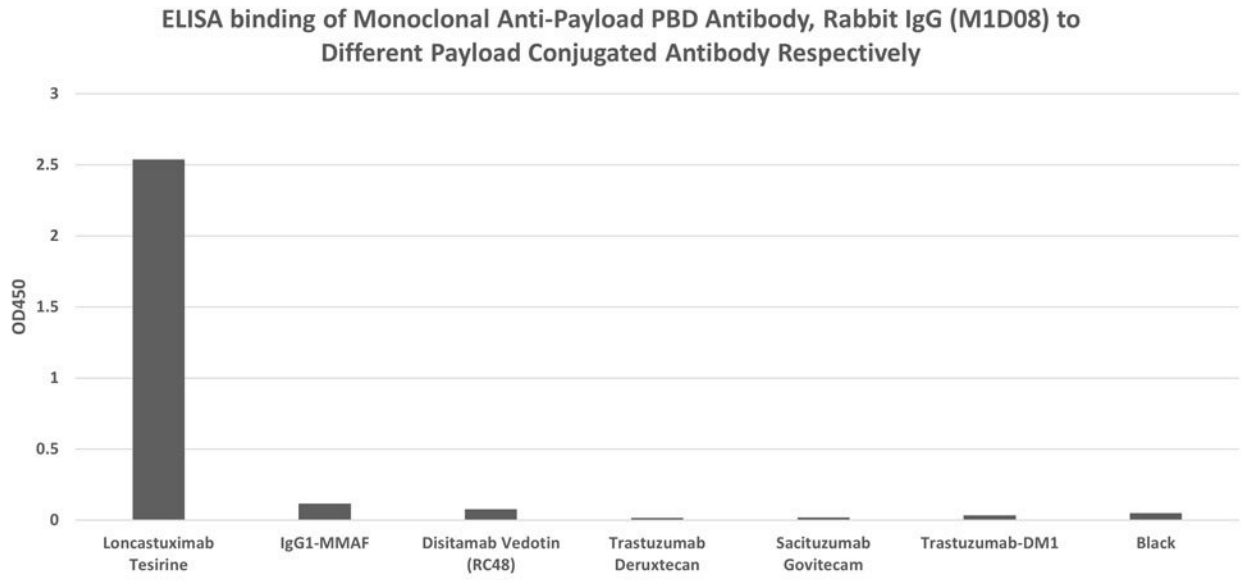


Immobilized Monoclonal Anti-Payload PBD Antibody, Rabbit IgG (M1D08) (Cat. No. PAD-MY2221) at 1 μg/mL, add Loncastuximab Tesirine in the 100% Human Serum and then add Biotinylated Human CD19 (20-291), His,Avitag, premium grade (Cat. No. CD9-H82E9) at 0.5 μg/mL. Detection was performed using HRP-conjugated Streptavidin (Acro, Cat. No. STN-NH913) (QC tested).



Serial dilutions of (PBD)SG3199 were added into Monoclonal Anti-Payload PBD Antibody, Rabbit IgG (M1D08) (Cat. No. PAD-MY2221): Loncastuximab Tesirine binding reactions. The half maximal inhibitory concentration (IC50) is 0.7587 μg/mL (Routinely tested).

Cross Verification



ELISA binding of Monoclonal Anti-Payload PBD Antibody, Rabbit IgG (M1D08) (Cat. No. PAD-MY2221) with Loncastuximab Tesirine, Disitamab Vedotin (RC48), IgG1-MMAF, Trastuzumab Deruxtecan, Sacituzumab Govitecam and Trastuzumab-DM1 conjugated antibody respectively.

The coating antibody was Monoclonal Anti-Payload PBD Antibody, Rabbit IgG (M1D08) (Cat. No. PAD-MY2221), used at 1 μg/mL concentration. The primary antibody were different payload conjugated antibodies, including Loncastuximab Tesirine, Disitamab Vedotin (RC48), IgG1-MMAF, Trastuzumab Deruxtecan, Sacituzumab Govitecam and Trastuzumab-DM1 conjugated antibodies used at 0.25 μg/mL concentration. The secondary antibody was HRP conjugated Anti-Human-IgG-Fc Antibody (6F11C8), mAb (Acro, Cat. No. IGG-LY69) used at 1:10000 concentration.

Monoclonal Anti-Payload PBD Antibody, Rabbit IgG (M1D08) (Cat. No. PAD-MY2221) is specific to Loncastuximab Tesirine and has no cross-reactivity with IgG1-MMAF, Disitamab Vedotin (RC48), Trastuzumab Deruxtecan, Sacituzumab Govitecam and Trastuzumab-DM1 (Routinely tested).

Background

Pyrrolobenzodiazepine (PBD) dimer, is a new generation of cytotoxic payload used in antibody-drug conjugates (ADCs). The PBD dimer binds to the minor groove of DNA to form effective cytotoxic DNA interstrand crosslinks, which can block cell division and kill cancer cells. This mechanism of action utilizes a completely different cellular target from that of tubulin inhibitors, as well as a different DNA damage pattern from other DNA-targeting payloads. Anti-PBD antibody is a rabbit monoclonal antibody specially reacts with PBD, which is more sensitive than mouse antibody. The anti-PBD antibody is a useful reagent in PK assay to determine conjugated antibodies.