Rev05
Update: Aug,31,2026

DATASHEET

DM1 Antibody (15L2), mAb, Mouse

Cat. No.: A02223

Overview

Specificity	The product is specific for DM1 and DM1 structurally similar molecules.
Host Species	Mouse
Immunogen	DM1-KLH
Conjugate	Unconjugated

Applications

Working concentrations for specific applications should be determined by the investigators. The appropriate concentrations may be affected by secondary antibody affinity, antigen concentration, the sensitivity of the method of detection, temperature, the length of the incubations, and other factors. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

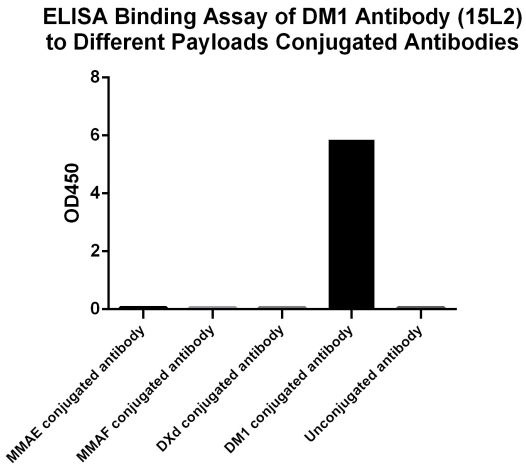
Application	Recommended Usage
ELISA	0.5-2 μg/ml
Sandwich ELISA	0.5-2 μg/ml
Competitive ELISA	0.5-2 μg/ml

Properties

Form	Liquid
Storage Buffer	Supplied in PBS, pH 7.4, containing 0.02% ProClin300.
Concentration	0.5 mg/mL
Storage Instructions	The product remains stable for 1 year at -20°C from the date of receipt. Avoid repeated freezing and thawing cycles.
Purification	Protein A affinity column
Isotype	Mouse IgG1, κ
Clonality	Monoclonal
Clone ID	15L2

Note	GenScript can customize this product per customer's request including product size, buffer components, etc.

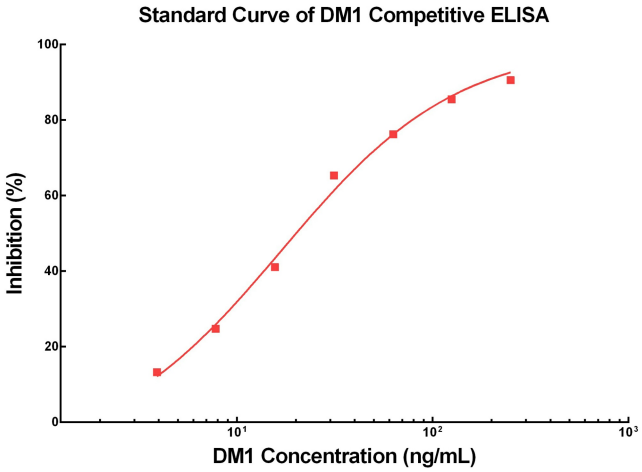
Examples



ELISA binding of DM1 Antibody (15L2), mAb, Mouse (GenScript, A02223) with DXd, MMAE, MMAF and DM1 conjugated antibody respectively.

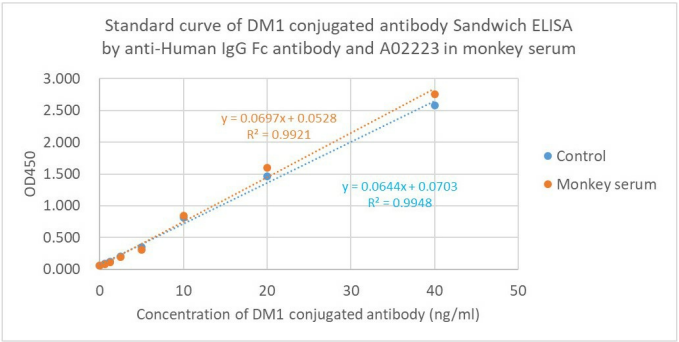
The coating antibody was DM1 Antibody (15L2), mAb, Mouse (GenScript, A02223) used at 2 μg/mL concentration. The primary antibody were different payload conjugated antibodies, including DXd, MMAE, MMAF and DM1 conjugated antibodies used at 1 μg/mL concentration. The secondary antibody was Mouse Anti-Human IgG Fc Antibody (50B4A9) [HRP], mAb (GenScript, A01854) used at 0.25 μg/ml concentration.

DM1 Antibody (15L2), mAb, Mouse (GenScript, A02223) is specific to DM1 and has no cross-reactivity with MMAE, MMAF, and DXd.



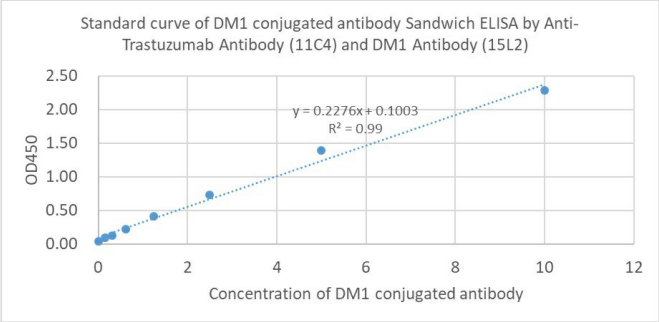
Standard curve of DM1 Competitive ELISA.
The competitive ELISA assay is developed by using free DM1 block the binding of DM1 Antibody (15L2), mAb, Mouse (GenScript, A02223) to HRP conjugated DM1.

Capture antibody: DM1 Antibody (15L2), mAb, Mouse, 2 μg/ml
Detection reagent: HRP conjugated DM1, 4 ng/ml
Free DM1 dilution start from 250 ng/ml.



Standard curve of DM1 conjugated Trastuzumab Sandwich ELISA by anti-Human IgG Fc antibody and A02223 in monkey serum.
The DM1 conjugated Trastuzumab Sandwich ELISA assay is developed by using DM1 Antibody (15L2), mAb, Mouse (GenScript, A02223) and Mouse Anti-Human IgG Fc Antibody (50B4A9)[HRP], mAb (GenScript, A01854) as the capture and detection antibodies, respectively.
The samples tested in this assay were DM1 conjugated Trastuzumab. The control samples were not serum spiked. The monkey serum samples were spiked with cynomolgus monkey

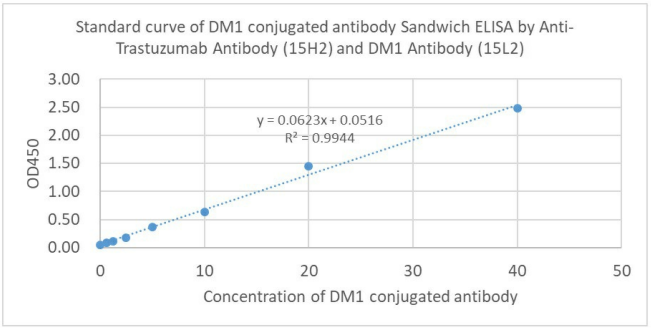
serum matrix.



Standard curve of DM1 conjugated Trastuzumab Sandwich ELISA by anti-idiotype antibody and A02223.
The Sandwich ELISA assay is developed by using DM1 Antibody (15L2), mAb, Mouse (GenScript, A02223) and Anti-Trastuzumab Antibody (11C4), mAb, Mouse (GenScript, A02032) and as the capture and detection antibodies, respectively.

In this ELISA assay, Anti-Trastuzumab Antibody (11C4), mAb, Mouse (GenScript, A02032) was labeled with HRP. GenScript can provide customized conjugation service for this product per customer's request.

Capture antibody: DM1 Antibody (15L2), mAb, Mouse, 2 μg/ml
Detection antibody: Anti-Trastuzumab Antibody (11C4), mAb, Mouse, 0.026 μg/ml



Standard curve of DM1 conjugated Trastuzumab Sandwich ELISA by anti-idiotype antibody and A02223.
The Sandwich ELISA assay is developed by using DM1 Antibody (15L2), mAb, Mouse (GenScript, A02223) and Anti-Trastuzumab Antibody (15H2), mAb, Mouse (GenScript, A02033) and as the capture and detection antibodies, respectively.

In this ELISA assay, Anti-Trastuzumab Antibody (15H2), mAb, Mouse (GenScript, A02033) was labeled with HRP. GenScript can provide customized conjugation service for this product per customer's request.

Capture antibody: DM1 Antibody (15L2), mAb, Mouse, 2 μg/ml
Detection antibody: Anti-Trastuzumab Antibody (15H2), mAb, Mouse, 0.156 μg/ml

Background

Target Background : Payloads are the important components of antibody-drug conjugates (ADCs). The most commonly used ADC payloads are MMAE, DM1, and DXd. ADC pharmacokinetic (PK) studies include free payload analysis, conjugated antibody analysis, and total antibody analysis via ligand-binding assay (LBA) and LC-MS/MS assay. The anti-payload antibody is a useful reagent in PK assay for determining conjugated antibodies. It can be used as a capture antibody to determine the conjugated antibody in LBA assay or through immunocapture to enrich the ADC sample in LC-MS/MS assay. The DM1, also known as mertansine, is a microtubule polymerization inhibitor. Trastuzumab emtansine (T-DM1), composed of trastuzumab conjugated to DM1, is a type of targeted cancer drug for breast cancer treatment. T-DM1 is targeted toward HER2 (ERBB2) positive breast cancer.

Synonyms : Mertansine, Maytansinoid DM1, DM 1, 139504-50-0

Limited Use License and Use Restrictions

Limited Use License and Use Restrictions	This Product is provided under a limited, non-exclusive, non-transferable, and non-sublicensable end-user license strictly limited to the permitted uses set forth in GenScript’ s official documentation, quotations, or written agreements. Any use beyond such scope requires GenScript’ s prior written authorization or license. Except as expressly authorized in writing by GenScript, Customer shall not, and shall not permit, procure, enable, or assist any third party to: (a) commercialize or otherwise exploit the Product, including by reselling, distributing, transferring, sublicensing, or otherwise making the Product (including any product incorporating the Product) available to any third party; (b) copy, reproduce, clone, reverse clone, sequence, analyze, characterize, deconstruct, reconstruct, reverse engineer, or otherwise attempt to discover the composition, sequence, structure, binding characteristics, epitope recognition characteristics, or other proprietary features of the Product; (c) modify, derivatize, humanize, optimize, mutate, design around, or generate any variants, derivatives, fragments, substitutes, or functional equivalents of the Product; or (d) use the Product, any information derived therefrom, or any computational, AI-enabled, or sequence-based design method to develop, manufacture, offer for sale, sell, or commercialize any product or service competitive with the Product or GenScript’ s products or services. All intellectual property rights and all rights not expressly granted herein are reserved by GenScript. No rights are granted by implication, estoppel, or otherwise.

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.

Manufacturer: Nanjing GenScript Biotech Co., Ltd. No. 28Yongxi Road, Jiangning District, Nanjing, Jiangsu, China