

VALIDATION DATA



Human Therapeutic IgG Mertansine ADC ELISA Kit Item No. 502872

Cayman's Human Therapeutic IgG Mertansine ADC ELISA Kit has been validated in rabbit, rat, monkey, pig, and mouse sera, cell supernatant, and cell culture medium. The validation experiments were designed to evaluate assay sensitivity, working range, precision, accuracy, and matrix compatibility under the conditions described in the kit booklet.

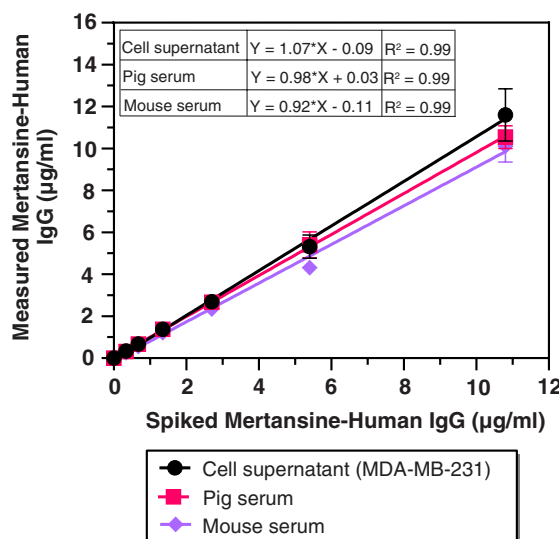
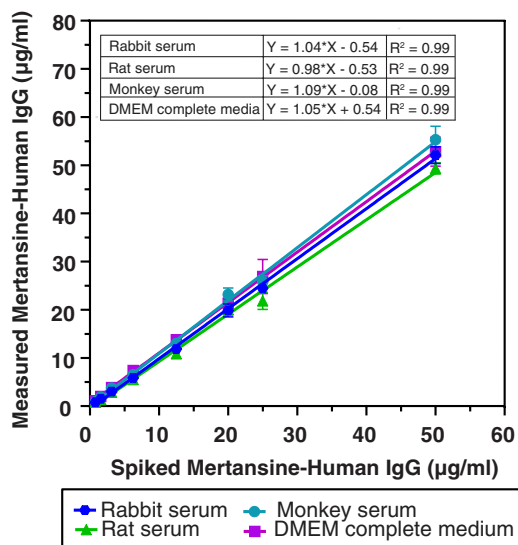
The data presented in this document describes the performance characteristics of the assay and is intended to assist users in experimental planning and interpretation of results.

Assay Range and Sensitivity

Assay Data Points	
Standard Curve Range	0.47-30 ng/ml
Lower Limit of Detection (LLOD)	0.2 ng/ml

Spike and Recovery

Rabbit, rat, monkey, pig, and mouse sera, MDA-MB-231 cell culture supernatant, and DMEM complete medium (DMEM+10% FBS+Pen-Strep) were spiked with Mertansine-Human IgG Conjugate and analyzed at multiple dilutions. The results are shown below.



WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 07/14/2026

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM

VALIDATION DATA



Linearity

Mouse serum, rat serum, and MDA-MB-231 cell culture supernatant were spiked with Mertansine-Human IgG Conjugate and analyzed at multiple dilutions using the Human Therapeutic IgG Mertansine ADC ELISA Kit. The results are shown in the table below.

Dilution Factor	Measured Concentration (µg/ml)	Linearity%
Mouse serum spiked with 12.8 µg/ml mertansine-human IgG conjugate		
900	13.1	100
2,700	14.2	108
8,100	14.0	107
24,300	12.5	95.4
Rat serum spiked with 50 µg/ml mertansine-human IgG conjugate		
2,700	48.6	100
8,100	50.6	104
24,300	50.0	103
72,900	48.1	99.0
MDA-MB-231 cell supernatant spiked with 10.8 µg/ml mertansine-human IgG conjugate		
800	10.3	100
1,600	10.9	106
3,200	12.1	117
6,400	13.1	127

NOTE: Linearity has been calculated using the following formula:

$\% \text{Linearity} = (\text{Observed concentration value, dilution adjusted} / \text{First observed concentration value in the dilution series, dilution adjusted}) * 100$

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM

VALIDATION DATA



Precision

Intra-assay precision was determined by analyzing 24 replicates of Control 1 (spiked mouse serum), Control 2 (spiked mouse plasma), and Control 3 (spiked cell supernatant) in a single assay.

Control	Measured Mertansine-Human IgG (ng/ml)	%CV
Control 1	6,750	10.3
Control 2	3,441	11.9
Control 3	775	6.2

Inter-assay precision was determined by analyzing replicates of Control 1 (spiked mouse serum), Control 2 (spiked mouse plasma), and Control 3 (spiked cell supernatant) in eight separate assays on different days.

Control	Measured Mertansine-Human IgG (ng/ml)	%CV
Control 1	7,682	12.9
Control 2	3,766	11.4
Control 3	822	9.3

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM