

Mouse IgG ELISA Kit  $\alpha$ b151276

★★★★★ 1 Abreviews 13 References 4 Images

Overview

Product name	Mouse IgG ELISA Kit				
Detection method	Colorimetric				
Precision	Intra-assay				
	Sample	n	Mean	SD	CV%
	overall	3			3.3%
	Inter-assay				
	Sample	n	Mean	SD	CV%
	overall	4			2.3%
Sample type	Serum, Cell culture media, Mouse IgG				
Assay type	Sandwich (quantitative)				
Sensitivity	1 ng/ml				
Recovery	Sample specific recovery				
	Sample type		Average %		Range
	Serum		89		% - %
	Cell culture media		85		% - %
	Goat Serum		96		% - %
Assay time	3h 15m				
Assay duration	Multiple steps standard assay				
Species reactivity	<b>Reacts with:</b> Mouse, Rat <b>Does not react with:</b> Goat, Cow				
Product overview	ab151276, an IgG mouse ELISA (Enzyme-Linked Immunosorbent Assay) kit is an in vitro enzyme-linked immunosorbent assay for the quantitative measurement of mouse IgG in mouse serum, plasma and supernatant from cell cultures.				

This assay employs a mouse IgG specific antibody coated onto plate strips. Standards and samples are pipetted into the wells and IgG present in the sample is bound to the wells by the immobilized antibody. The wells are washed and an HRP-conjugated anti-mouse IgG detector antibody is added. After washing away unbound detector antibody, a TMB substrate solution is added to the wells and color develops in proportion to the amount of IgG bound. The developing blue color is measured at 600 nm. Optionally the reaction can be stopped with the Stop Solution which changes the color from blue to yellow and the intensity can be measured at 450 nm.

## Notes

There are five classes of mammalian immunoglobulins: IgA, IgD, IgE, IgM, and IgG. IgG is the most abundant immunoglobulin and is equally distributed in blood and tissue. In mice, the IgG class is further divided into four subclasses: IgG1, IgG2a/ IgG2c (strain specific), IgG2b, and IgG3. The general immunoglobulin structure is composed of four polypeptide chains, two heavy and two light chains linked together and to each other by disulfide bonds, creating a tetrameric quaternary structure. The resulting tetramer creates two identical halves which together form a Y like structure. While the amino-terminal portions that exhibits highly variable amino-acid composition are involved in antigen binding, the C terminal constant parts are involved in complement binding, placental passage and binding to cell membrane. IgG is involved in response to a foreign antigen. The presence of IgG usually signifies a mature antibody response. IgG has a molecular weight of about 150 kDa, it can bind to many pathogens and also plays an important role in antibody-dependent cell-mediated cytotoxicity. Typically mouse serum and plasma samples contain about 7 to 10 mg/ml of IgG.

## Platform

Microplate

## Properties

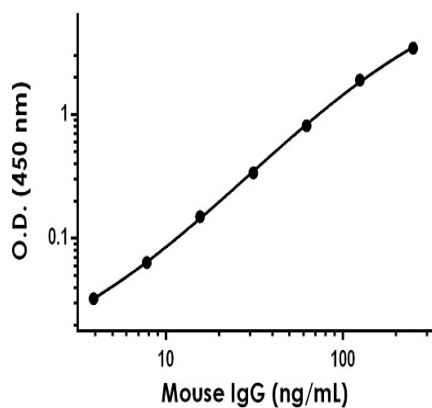
**Storage instructions** Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
10X Blocking Buffer	1 x 6ml
10X GAM (H+L)-HRP Detector Antibody	1 x 1ml
20X Buffer	1 x 20ml
HRP Development Solution	1 x 6ml
IgG Mouse Microplate	1 unit
Normal Mouse IgG Standard (Lyophilized)	1 x 1µg
Stop Solution	1 x 12ml

## Cellular localization

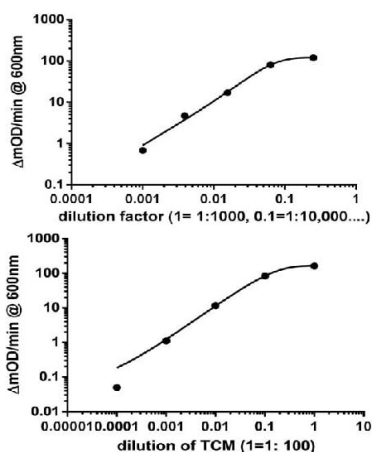
Secreted

## Images



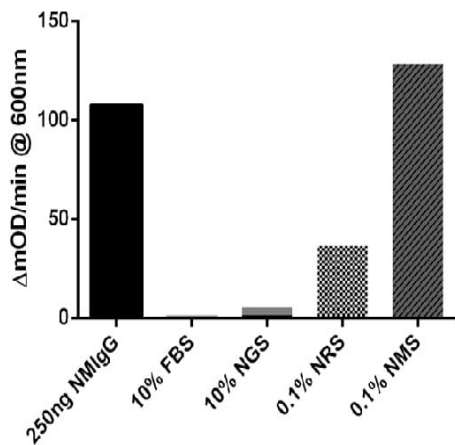
Example of Mouse IgG standard curve in 1X Incubation Buffer.

Raw data values are shown in the table. Background-subtracted data values (mean  $\pm$  SD) are graphed. Raw data values are shown in the table. Background-subtracted data values (mean  $\pm$  SD) are graphed.

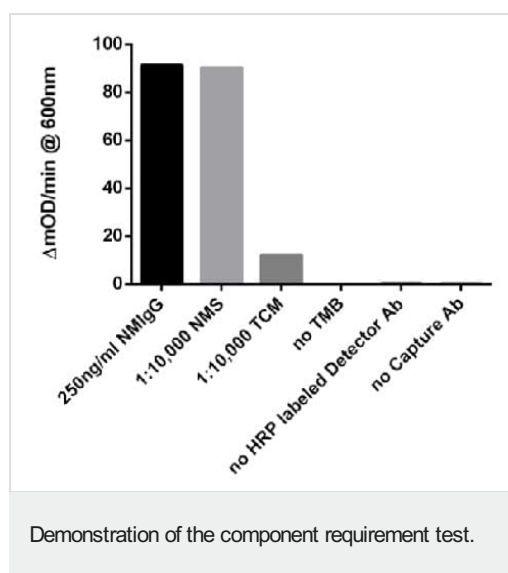


Example dilution series

Top image: Example dilution series of normal mouse serum (NMS) in the working range of the assay. Bottom image: Example dilution series of a mouse hybridoma cell culture media (TCM) in the working range of the assay.



Demonstration of the tested species specificity.



**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

### Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors