abcam

Product datasheet

Rabbit IgG ELISA Kit ab187400
SimpleStep ELISA®

2 References　6 图像

概述

产品名称	兔IgG ELISA试剂盒
检测方法	Colorimetric

精确度

批次内

样品	n	Mean	SD	CV%
Overall	3			1.23%

批次间

样品	n	Mean	SD	CV%
Overall	3			4.7%

样品类型	Cell culture supernatant, Serum, Hep Plasma, EDTA Plasma, Cit plasma
检测类型	Sandwich (quantitative)
灵敏度	0.23 ng/ml
范围	0.31 ng/ml - 20 ng/ml

回收率

特定样本回收率

样品类型	平均%	范围
Cell culture media	89.9	78.4% - 112.2%
Tissue Culture Media	86.59	77.3% - 99.7%

检测时间	1h 30m
实验步骤	One step assay
种属反应性	**与反应：** Rabbit **不与反应：** Goat, Cow, Pig
产品概述	Rabbit IgG ELISA Kit (ab187400) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of IgG protein in cell culture supernatant, cit plasma, edta plasma, hep plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Rabbit IgG

with 0.23 ng/ml sensitivity.

SimpleStep ELISA® technology employs capture antibodies conjugated to an affinity tag that is recognized by the monoclonal antibody used to coat our SimpleStep ELISA® plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. See the SimpleStep ELISA® protocol summary in the image section for further details. Our SimpleStep ELISA® technology provides several benefits:

- Single-wash protocol reduces assay time to 90 minutes or less
- High sensitivity, specificity and reproducibility from superior antibodies
- Fully validated in biological samples
- 96-wells plate breakable into 12 x 8 wells strips

A 384-well SimpleStep ELISA® microplate (**ab203359**) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

SPECIES REACTIVITY This kit recognizes rabbit IgG protein. Other species reactivity was determined by measuring 10,000X diluted serum samples of various species, interpolating the protein concentrations from the rabbit standard curve, and expressing the interpolated concentrations as a percentage of the protein concentration in rabbit serum assayed at the same dilution. Reactivity < 3% was determined for the following species: Human, Mouse, Rat, Dog, Goat, Pig and Cow.

说明	There are five classes of immunoglobulins in Human and mouse: IgA, IgD, IgE, IgM, and IgG. So far, four istotypes have been identified (IgA, IgE, IgG, and IgM) in rabbit. IgG is the most abundant immunoglobulin and is equally distributed in blood and tissue. Rabbit has only one IgG subclass,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 antibodydependent cell-mediated cytotoxicity. Typically rabbit serum and plasma samples contain about 5 to 10 mg/ml of IgG. The rabbit immune system has been documented as a vehicle for developing antibodies with higher affinity and more diverse recognition of many molecules including phospho-peptides, carbohydrates and immunogens that are not otherwise immunogenic in mouse. The main type of antibodies available from rabbit is polyclonal antibodies. In recent years, the use of hybridoma technology for the production of rabbit monoclonal antibodies has created the need for a fast and simple procedure for quantifying antibody production in vitro (e.g., culture supernatant) or in vivo (e.g., ascites). An accurate determination of immunoglobulin levels in the serum, plasma or hybridoma-culture supernatant is essential to study the effect of drugs or physical parameters on the level of immunoglobulin secretion or hybridoma growth.

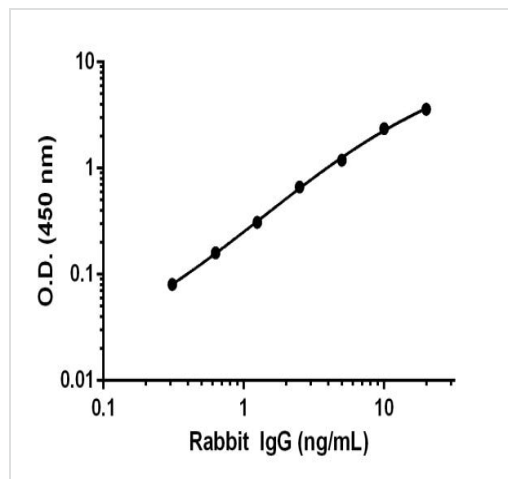**平台**   Microplate

性能

存放说明　　　　　　　　　Store at +4°C. Please refer to protocols.

组件	1 x 96 tests	10 x 96 tests
10X Rabbit IgG Capture Antibody	1 x 600µl	10 x 600µl
10X Rabbit IgG Detector Antibody	1 x 600µl	10 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml	1 x 200ml
Antibody Diluent 5B	1 x 6ml	10 x 6ml
Plate Seals	1 unit	10 units
Rabbit IgG Lyophilized Purified Protein	2 vials	10 x 2 vials
Sample Diluent NS (ab193972)	1 x 50ml	2 x 250ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit	10 units
Stop Solution	1 x 12ml	1 x 120ml
TMB Development Solution	1 x 12ml	1 x 120ml

细胞定位　　　　　　　　　Secreted

图片

Example of rabbit IgG standard curve in Sample Diluent NS

Background-subtracted data values (mean +/- SD) are graphed.

Standard Curve Measurements			
Conc.	O.D. 450 nm		Mean
(ng/mL)	1	2	O.D.
0	0.06	0.06	0.06
0.31	0.14	0.14	0.14
0.63	0.22	0.22	0.22
1.25	0.36	0.38	0.37
2.5	0.71	0.74	0.73
5	1.26	1.25	1.26
10	2.34	2.52	2.43
20	3.64	3.68	3.66

Standard curve

Example of rabbit IgG standard curve in Sample Diluent NS. The Rabbit IgG standard curve was prepared as described. Raw data values are shown in the table. Background-subtracted data values (mean +/- SD) are graphed.

Example of rabbit serum IgG level in Sample Diluent NS
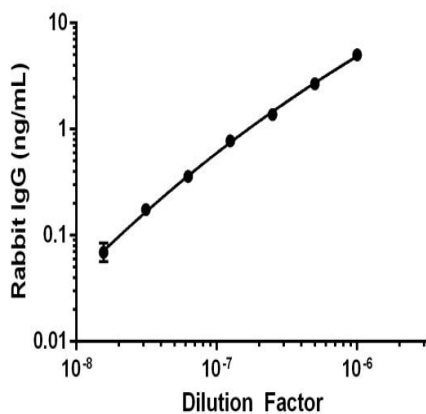
Interpolated rabbit IgG value are graphed.

Dilution Factor	Interpolated value		1:1 million diluted rabbit serum
Undiluted	ng/mL		5.02
	% Expected value		90.96
2	ng/mL		2.8
	% Expected value		97.09
4	ng/mL		1.38
	% Expected value		100.00
8	ng/mL		0.78
	% Expected value		113.54
16	ng/mL		0.36
	% Expected value		104.83
32	ng/mL		0.18
	% Expected value		102.02

Linearity of dilution.

Normal rabbit serum was diluted in Sample Diluent NS. Linearity of dilution is determined based on interpolated values from the standard curve. Linearity of dilution defines a sample concentration interval in which interpolated target concentrations are directly proportional to sample dilution.
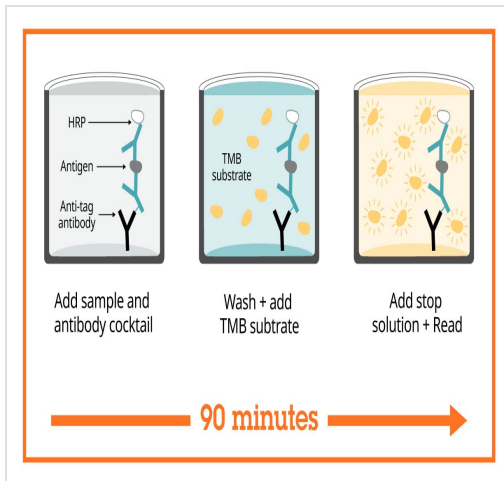
SimpleStep ELISA technology allows the formation of the antibody-antigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.

Sandwich ELISA - Rabbit IgG ELISA Kit (ab187400)

To learn more about the advantages of SimpleStep ELISA® kits see **here**.

Sandwich ELISA - Rabbit IgG ELISA Kit (ab187400)

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.cn/abpromise** or contact our technical team.

Terms and conditions

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