

Product datasheet

Chicken IgY ELISA Kit ab189577

SimpleStep ELISA

[5 Images](#)

Overview

Product name Chicken IgY ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
Overall	3			2.2%

Inter-assay

Sample	n	Mean	SD	CV%
Overall	3			4.49%

Sample type

Cell culture supernatant, Serum, Hep Plasma, EDTA Plasma, Cit plasma

Assay type

Sandwich (quantitative)

Sensitivity

14 pg/ml

Range

0.16 ng/ml - 10 ng/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Antibody Diluent 4B	103.18	99.6% - 105.68%
1X Cell Extraction Buffer PTR	98.48	97.68% - 100.53%
1X Wash Buffer	98.34	87.31% - 104.46%
OF DMEM Medium	62.52	52.05% - 76.75%
10F DMEM Medium	75.89	70.17% - 86.63%

Assay time

1h 30m

Assay duration

One step assay

Species reactivity

Reacts with: Chicken

Does not react with: Goat, Cow, Pig

Product overview

Chicken IgY ELISA Kit (ab189577) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of IgY protein in cell culture supernatant, cit plasma, edta plasma, hep plasma, serum, and egg yolk. It uses our proprietary SimpleStep ELISA® technology. Quantitate Chicken IgY with 14 pg/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.

Notes

In chickens, immunoglobulin Y (IgY) is the functional equivalent to Immunoglobulin G (IgG). Like IgG, it is composed of two light and two heavy chains. Structurally, these two types of immunoglobulin differ primarily in the heavy chains, which in IgY have a molecular mass of about 65,100 atomic mass units (amu), and are thus larger than in IgG. The light chains in IgY, with a molar mass of about 18,700 amu, are somewhat smaller than the light chains in IgG. The molar mass of IgY thus amounts to about 167,000 amu. The steric flexibility of the IgY molecule is less than that of IgG.

Functionally, IgY is partially comparable to Immunoglobulin E (IgE), as well as to IgG. However, in contrast to IgG, IgY does not bind to Protein A, to Protein G, or to cellular Fc receptors. Furthermore, IgY does not activate the complement system.

Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances.

It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

Platform

Microplate

Properties

Storage instructions

Store at +4°C. Please refer to protocols.

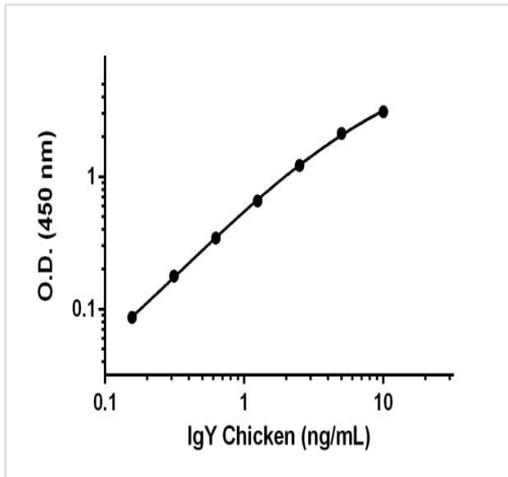
Components	1 x 96 tests
10X Chicken IgY Capture Antibody	1 x 600µl
10X Chicken IgY Detector Antibody	1 x 600µl

Components	1 x 96 tests
10X Wash Buffer PT (ab206977)	1 x 20ml
50X Cell Extraction Enhancer Solution (ab193971)	1 x 1ml
5X Cell Extraction Buffer PTR (ab193970)	1 x 10ml
Antibody Diluent 4B	1 x 6ml
Chicken IgY Lyophilized Purified Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

Relevance

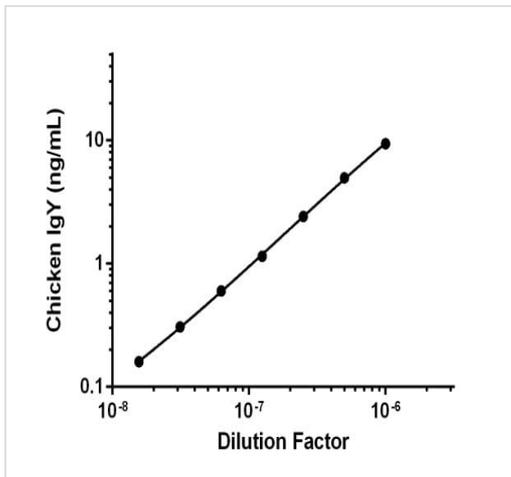
Secreted immunoglobulins have two separable functions: one is to bind specifically to pathogenic molecules, the other is to recruit cells and molecules to destroy the opsonized pathogen. IgY has a tetrameric structure consisting of two identical light chains ($M_r = 24$ kDa) and two identical heavy chains ($M_r = 73$ kDa).

Images



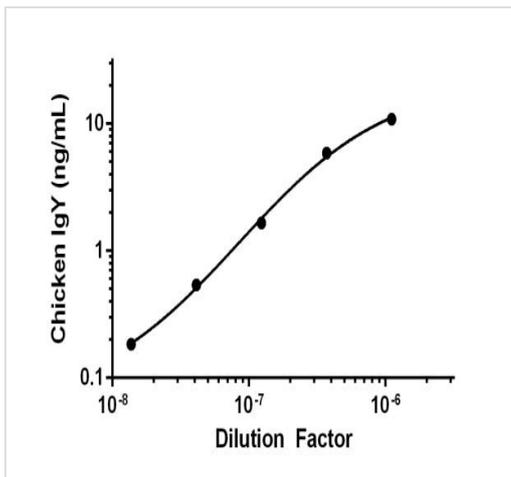
Background-subtracted data values (mean +/- SD) are graphed.

Example of Chicken IgY standard curve.



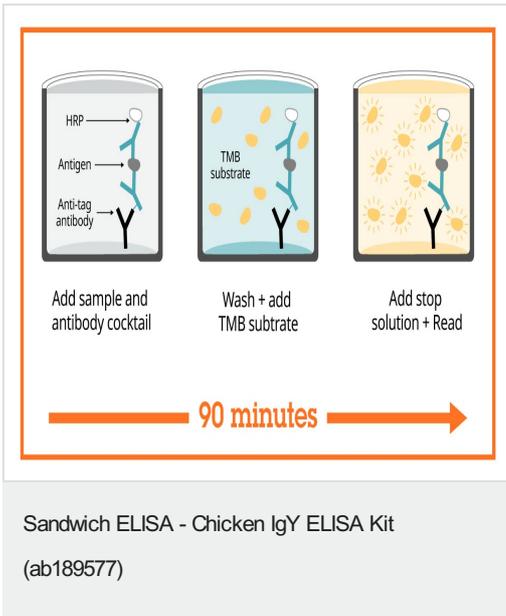
Interpolated chicken IgY value are graphed.

Example of chicken serum IgY level in Sample Diluent NS.



Interpolated chicken IgY value are graphed.

Example of chicken egg yolk IgY level in Sample Diluent NS.



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.

Get more done with SimpleStep ELISA

- Easy to use**
Single-wash 90-minute protocol
- Flexible**
Matched antibody pairs available
- Precision antibodies**
High sensitivity, specificity and reproducibility
- Scalable**
Now in 10-pack and 384-well formats

Sandwich ELISA - Chicken IgY ELISA Kit
(ab189577)

To learn more about the advantages of SimpleStep ELISA[®] kits see [here](#).

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

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