

Cat IgG ELISA Kit # 300-100-CGG

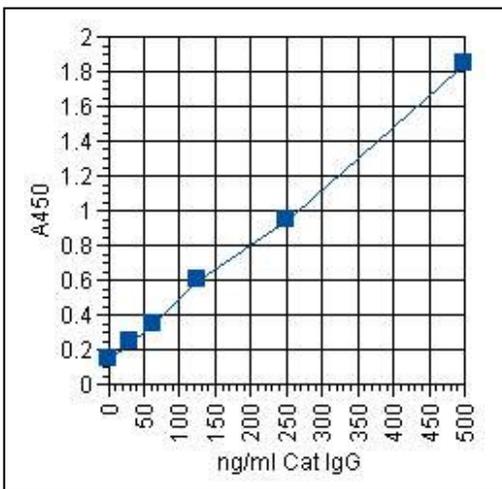
Immunoglobulins belong to a large group of related glyco-proteins that make up approximately 20% of the serum proteins. The serum immunoglobulins react with antigens and confer immunity to individuals. All immunoglobulins share the basic structure of: 2 identical heavy chains joined by disulfide bonds to 2 identical light chains. Both the heavy (H) chains and the light (L) chains are divided into constant and variable regions. The constant regions have similar amino acid composition between all the immunoglobulin classes while the variable regions encompasses about 110 amino acids characterized by a high degree or sequence variability.

Its H-chain type, based on the amino acid sequence, determines the classes of an immunoglobulin. There are 5 types of H-chains that correspond to the following immunoglobulin classes: IgG, IgA, IgM, IgD, and IgE.

IgG is further subdivided into 4 subclasses with ~95% homology. There are 2 subclasses of IgA. IgG and IgA exists in serum as a monomer consisting of a single 4-polypeptide unit. IgM exists in serum as a pentamer. IgA may also polymerize to form polymers containing 2-5 structural units.

It is important to measure the level of immunoglobulins in serum for Antibody deficiency conditions, such as Primary hypogammaglobulinaemia, or other immune deficiency diseases such as AIDS. When evaluating patients with recurrent infections, suspected immunodeficiency, allergic disease and many other conditions, it may be necessary to quantify the levels of immunoglobulins.

ADI's Cat IgG ELISA provides is a rapid, specific and sensitive assay for measuring Cat IgG in serum or other biological fluids.



ELISA Kit Features

- Precoated, ready-to-use 96-well strip plate**
Economical and can be used for **6-12 months**.
- Convenient liquid Standards** (0, 31.2, 62.4, 125, 250, 500 ng/ml)
- Direct sample (20 ul; 1:25k-100k diluted) analysis.**
- 105 minute assay time**, three convenient room temp. incubations (60+30 +15 min.).
- Time saving ready-to-use substrate solution.**
- High sensitivity** (20 ng/ml), excellent precision.

Assay Procedure

Allow all reagents to reach room temperature. Arrange and label required number of strips.

- Step 1.** Pipet 20 ul stds, pre-diluted samples (20 ul; 1:25k-100k). Dispense 80 ul of zero stds. into each well. Mix gently. Cover the plate and incubate at room temp. for **60 min**.
- Step 2.** Aspirate and wash the plate three times.
- Step 3.** Add 100 ul of 1x HRP-labeled anti-Cat IgG conjugate. Mix gently, cover the wells, and incubate at room temperature for **30 min**
- Step 4.** Aspirate and wash the plate five times.
- Step 5.** Add 100 ul of TMB solution. Mix gently, cover the wells, and incubate at room temperature for **15 min**
- Step 6.** Pipet 100 ul of stop solution into each well and mix gently (blue color turns yellow). Measure Abs. at 450 nm.

Specificity and species crossreactivity

Cross reactivity was tested with the purified animal IgG at 125 ng/ml: Mouse, Rat, Human, Monkey, Sheep, Chicken, Bovine, Goat and Pig IgG all showed less than 1% cross reactivity.