



3050 Spruce Street
Saint Louis, Missouri 63103 USA
Telephone 800-325-5832 • (314) 771-5765
Fax (314) 286-7828
email: techserv@sial.com
sigma-aldrich.com

Product Information

Anti-Chicken IgY (IgG) (whole molecule)

FITC Conjugate

IgG Fraction of Antiserum

Product No. **F 4137**

Product Description

Anti-Chicken IgY (IgG) is developed in rabbit using purified chicken IgY (IgG) as the immunogen. Whole antiserum is fractionated and then further purified by ion exchange chromatography to provide the IgG fraction of anti-serum. This fraction is essentially free of other rabbit serum proteins. Rabbit anti-chicken IgY (IgG) is conjugated to Fluorescein Isothiocyanate (FITC) in an alkaline reaction, then further purified to remove unbound FITC.

The antiserum is determined to be immunospecific for chicken IgY (IgG) by immunoelectrophoresis versus normal chicken serum and chicken IgY (IgG) prior to conjugation.

Identity and purity of the antibody is established by immunoelectrophoresis (IEP), prior to conjugation. Electrophoresis of the antibody preparation followed by diffusion versus anti-rabbit IgG and anti-rabbit whole serum results in single arcs of precipitation in the gamma region.

Reagent

The conjugate is provided as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Precautions

Due to the sodium azide content a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazards and safe handling practices.

Storage

For continuous use, store at 2-8 °C for up to one month. For extended storage, the solution may be frozen in working aliquots. Repeated freezing and thawing is **not** recommended. Storage in "frost-free" freezers is **not** recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use.

Product Profile

1. A working dilution of at least 1:200 was determined by indirect immunofluorescent labeling of human peripheral blood lymphocytes.
2. A dilution of at least 1:200 was determined by indirect immunofluorescent labeling of formalin-fixed, paraffin-embedded human tonsil sections using chicken anti-human IgG as the primary antibody.

In order to obtain best results it is recommended that each individual user determine the optimum working dilutions for their system by titration assay.

F/P Molar Ratio 2.5 to 6.5

The F/P molar ratio is determined spectrophotometrically as follows:

$$F/P = \frac{A_{495} \times 1.4}{A_{280} - (0.36 \times A_{495})} \times 0.41$$

Where:

- 0.2 = The extinction coefficient of bound FITC at a concentration of 1 µg per ml at pH 7.2
- 0.36 = The fluorochrome absorbance correction factor (non-protein absorbance).

Protein Concentration = 10 to 20 mg/ml by absorbance at 280 nm ($E_{280}^{1\%} = 14.0$).

kaa 04/03