



**Atto 590 rabbit anti-chicken IgG
(whole Molecule)
Product No. 50913**

Product Description

Anti-chicken IgG (whole molecule) (Sigma, C6778) is developed in rabbit using purified chicken IgG as the immunogen. Affinity isolated antigen specific antibody is purified from rabbit anti-chicken IgG antiserum to remove essentially all rabbit serum proteins, including immunoglobulins, which do not specifically bind to chicken IgG.

Rabbit anti-chicken is conjugated to Atto 590 NHS (Abs.max. 590 nm; Em.max. 634 nm),(Fluka, 79636), then further purified via gel permeation chromatography and dialysis to remove unbound Atto-Dye.

Reagents

Atto 590 rabbit anti-chicken IgG (whole molecule) is provided in unit sizes of 1 ml as 1 mg/ml solutions in 0.1 M sodium phosphate, 0.1 M NaCl, pH 7.5, containing 5 mM sodium azide as a preservative.

Working Concentrations

It is recommended that each individual user determine the optimum working dilution empirically for their systems.

Generally concentrations of 1-10 µg /ml are sufficient for many applications.

Fluorophore / Protein (F/P) Ratio: 2 to 9 (The exact F/P ratio of each lot is mentioned on the certificate of analysis)

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

$$F / P = \frac{A_{590} \times 203,000}{[A_{280} - (A_{590} \times 0,43)] \times 120,000}$$

A₅₉₀= absorbance at 590 nm measured in a cuvette with a pathlength of 1 cm

A₂₈₀ = absorbance at 280 nm measured in a cuvette with a pathlength of 1 cm

203,000 = molar extinction coefficient (ε) of a IgG at 280 nm [cm⁻¹M⁻¹]

120,000 = molar extinction coefficient (ε) of the Atto 590 dye at 590 nm [cm⁻¹M⁻¹]

0.43 = correction factor due to the fluorophore's absorbance at 280 nm

Storage / Stability

For continuous use, store at 2-8 °C for up to three months. For extended storage, the solution may be frozen in working aliquots at -20 °C. Frozen aliquots are stable for at least six months. 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. Protect fluorescent conjugates from light.

Precautions and Disclaimer

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.