



## Product Information

### Anti-Bovine IgG (whole molecule)–FITC conjugate

antibody produced in rabbit  
affinity isolated antibody

Catalog Number **F7887**

#### Product Description

Antiserum is developed in rabbit using purified bovine IgG as the immunogen. Antibody is isolated from rabbit anti-bovine IgG antiserum by immunospecific purification which removes essentially all rabbit serum proteins, including immunoglobulins, which do not specifically bind to bovine IgG. Rabbit anti-bovine IgG is conjugated to fluorescein isothiocyanate (FITC). Free FITC is removed by gel filtration.

Specificity of the anti-bovine IgG antibodies for bovine IgG is determined by immunoelectrophoresis (IEP), prior to conjugation, using normal bovine serum and bovine IgG.

Identity and purity of the antibody is established by immunoelectrophoresis, 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.

#### Reagent

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

#### Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. 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. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

#### Storage/Stability

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

#### Product Profile

1. A minimum dilution of 1:300 was determined by immunohistology using formalin fixed paraffin embedded rabbit spleen and bovine anti-rabbit IgG as the primary antibody.
2. A minimum dilution of 1:300 was determined by indirect immunofluorescent labeling of rabbit spleen cells using bovine anti-rabbit IgG as the primary antibody.

In order to obtain best results, it is recommended that each researcher determine the optimal working dilution for their system by titration assay.

Protein Concentration: Determined by absorbance at 280 nm and 495 nm ( $E_{280}^{1\%} = 14.0$ ,  $E_{495}^{1\%} = 15.0$ ).

F/P Molar Ratio: 3–8

The F/P Molar ratio of FITC-Antibody conjugates 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 $\mu$ g/ml at pH 7.2.

0.36 = The fluorochrome absorbance correction factor (non-protein absorbance).

0.41 = The conversion factor of fluorochrome to protein ratios from mass to molar ratios.

In an agar diffusion assay, the conjugate produces a precipitation arc at a dilution of 1:64 versus a 1:640 dilution of normal bovine serum.

Working dilution should be determined by titration assay. Due to differences in assay systems, the titer may not reflect the user's actual working dilution.

MG,KAA,PCS,KMR,MAM 06/07-1

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