

## **Product datasheet for RA101**

## OriGene Technologies, Inc.

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## **Protein G Protein**

## **Product data:**

**Product Type:** Recombinant Proteins

**Description:** Protein G recombinant protein, 1 mg

**Purity:** This product is chromatographically pure Protein G and shows predominantly a single band

by SDS-PAGE.

**Buffer:** Presentation State: Aff - Purified

State: Lyophilized purified Ig fraction without preservatives.

**Reconstitution Method:** Restore with 1 ml deionized water (or equivalent).

Dilute only prior to immediate use.

**Preparation:** Lyophilized purified Ig fraction without preservatives.

**Applications:** Suitable for use as an antigen, as a Control or standard in assays, for conjugation and for

most other immunological methods. This recombinant Protein G contains only IgG binding

domains, ensuring maximum specific IgG binding.

**Protein Description:** Protein G (recombinant, E. coli), unconjugated. Extinction Coefficient: 1% at 280 nm is 9.5

(E0.1% of 9.5). Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-

Protein G. No reaction was observed against anti-Protein A.

**Note:** Approximately 5 mg of human IgG can be bound by 1 mg of Protein G.

Optimal binding of Protein G to antibodies occurs at pH 5-6, with elution at pH 2.5-3.

**Storage:** Store vial at 2-8°C prior to restoration.

For extended storage aliquot contents and freeze at -20°C or below.

Avoid cycles of freezing and thawing.

**Stability:** Shelf life: one year from despatch.

**Summary:** Protein G is a bacterial protein derived from the cell wall of certain strains of b-hemolytic

Streptococcci. It binds with high affinity to the Fc portion of various classes and subclasses of immunoglobulins from a variety of species. Protein G binds to all IgG subclasses from human, mouse and rat species. It also binds to total IgG from guinea pig, rabbit, goat, cow, sheep, and

horse.

Protein G binds preferentially to the Fc portion of IgG, but unlike Protein A can also bind to the Fab region, making it useful for purification of F(ab') fragments of IgG. Due to it's affinity for the Fc region of many mammalian immunoglobulins, protein G is considered a universal

reagent in biochemistry and immunology.





**Protein Families:** 

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