



## Technical Data Sheet

### Recombinant Cys-Protein G

#### **Cys-Protein G**

Protein G is a bacterial protein derived from the cell wall of certain strains of b-hemolytic Streptococci. 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 can also bind to the Fab region, making it useful for purification of F(ab') fragments of IgG. Due to its affinity for the Fc region of many mammalian immunoglobulins, protein G is considered a universal reagent in biochemistry and immunology.

<b>Catalog Number:</b>	RC2113-13
<b>Source:</b>	<i>Escherichia coli</i> .
<b>Molecular Weight:</b>	Approximately 21.9 kDa with a Cys on N-terminus, a single non-glycosylated polypeptide chain containing 201 amino acids. But it migrates with an apparent molecular mass of 40 kDa in SDS-PAGE.
<b>Quantity:</b>	1mg/10mg/100mg/1g
<b>AA Sequence:</b>	CLPKTDTYKL ILNGKTLKGE TTTEAVDAAT AEKVKQYAN DNGVDGEWTY DDATKTFTVT EKPEVIDASE LTPAVTTYKL VINGKTLKGE TTTEAVDAAT AEKVKQYAN DNGVDGEWTY DDATKTFTVT EKPEVIDASE LTPAVTTYKL VINGKTLKGE TTKAVDAET AEKAFKQYAN DNGVDGVWVTY DDATKTFTVT E
<b>Purity:</b>	> 95 % by SDS-PAGE and RP-HPLC analyses.
<b>Specific Activity:</b>	The recombinant Protein G is a genetically engineered protein containing 3 IgG-binding regions of protein G. Cell wall binding region, cell membrane binding region and albumin binding region have been removed from the recombinant Protein G to ensure the maximum specific IgG binding. The recombinant Protein G is ideal for purification of polyclonal or monoclonal IgG antibodies. Protein G binds to various human, mouse and rat IgG subclasses (e.g., human IgG1, IgG2, IgG3, IgG4; mouse IgG2a, IgG2b, IgG3; rat IgG2a, IgG2c). It also binds to total IgG from cow, goat, sheep, house and rabbit.
<b>Physical Appearance:</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Formulation:</b>	Lyophilized from additive free solution.
<b>Endotoxin:</b>	Less than 0.1 EU/μg of Cys-Protein G as determined by LAL method.
<b>Reconstitution:</b>	Dissolve with distilled water or saline.



# Bio Basic Inc.

A world leader in serving science

---

**Storage (lyophilized):**

Keep at -20 °C. **Avoid repeated freeze/thaw cycles after reconstitution.**

**Usage:**

This material is offered by Bio Basic Canada Inc. for research, laboratory or further evaluation purposes. **NOT FOR HUMAN USE.**

---