RayBiotech, Inc.

3607 Parkway Lane suite 200
Norcross,GA 30092
Tel: 770-729-2992, 1-888-494-8555
Fax: 770-206-2393
Website: www.raybiotech.com
Email: info@raybiotech.com

Certificate of Analysis and Data Sheet

Recombinant Protein G

Catalog No.	**Source**
228-11330	*N/A*

Description:

Recombinant streptococcal protein G lacking the albumin binding region thereby avoiding undesirable reactions with albumin, though the Fc binding domain is still present. The recombinant Protein G is produced in Escherichia coli using sequence from Streptococcus C1-C2-C3. The Protein G contains amino acids 190-384 having a molecular mass of 21.6 kDa. The Protein-G migrates on SDS-PAGE around 32 kDa.

Formulation:

Lyophilized white Powder containing no additives.

Purity:

>95% as determined by SDS-PAGE and RP-HPLC.

Amino Acid Sequence:

MTYKLILNGKTLKGETTTEAVDAATAEKVFKQYANDNGVDGEWTYDDATKTFTVTEKPEVIDASELTPA
VTTYKLVINGKTLKGETTTEAVDAATAEKVFKQYANDNGVDGEWTYDDATKTFTVTEKPEVIDASELTP
AVTTYKLVINGKTLKGETTTKAVDAETAEKAFKQYANDNGVDGVWTYDDATKTFTVTE.

Specificity:

1. Binds with greater affinity to most mammalian immunoglobulins than Protein A, including human IgG3 and rat IgG2a.
2. Does not bind to human IgM, IgD and IgA.

Reconstitution:

Reconstitution with deionized water or PBS.

Storage:

2 years at -20°C. After reconstitution, aliquot and store at -20°C.
Avoid repeated freeze/thaw cycles.

Applications:

Protein G binds to the constant region of many species of immunoglobulin G. It can be used to detect, quantify and purify IgG antibodies and antibody/antigen complexes. Recombinant Protein G contains only IgG binding domains. The albumin-binding domain as well as cell wall and cell membrane binding domains have been removed to ensure the maximum specific IgG binding capacity.