

## CERTIFICATE of ANALYSIS

<b>PRODUCT:</b>	<b>Recombinant Protein G</b> M.W. 26.1 kDa
<b>PRODUCT NUMBER:</b>	P-2709
<b>LOT NUMBER:</b>	H1164
<b>FORM:</b>	Lyophilized with no additive
<b>SOURCE:</b>	<i>E. coli</i>
<b>SEQUENCE:</b>	Amino acid 190-384 of the <i>Streptococcus sp.</i> Protein G Ig binding domains with 6x His-tag on the N-terminus. Gene Bank Accession Number CAA27638
<b>PURITY</b> (SDS-PAGE and HPLC):	> 98%
<b>RECONSTITUTION:</b>	In water, to a concentration of 5 mg/ml gives a clear solution.
<b>APPLICATIONS:</b>	Protein G binds to the constant region of many species of immunoglobulin G. Protein G 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. The 6-His-tag on the N-terminus can be used for affinity purification or protein detection using anti-His-tag antibodies. 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.
<b>SPECIFICITY:</b>	Under optimal conditions, 1mg Protein G will bind to approximately 5mg human IgG. Optimal binding of Protein G to antibodies occurs at pH 5.0 to 6.0 and can be eluted over a pH range of 2.5 to 3.0.
<b>STORAGE &amp; HANDLING:</b>	Store desiccated at -20°C. After reconstitution, aliquot and store at -20°C. Avoid repeated freezing and thawing.  CAUTION: For research use only. Not for human or drug use. The pharmacological and toxicological properties of this product have not been fully investigated. Use caution when handling. Do not use this compound if you are not fully trained or are unaware of the hazards involved.

Verified: KLS