

# Recombinant Protein G Agarose

Cat. No. COP08 Lot. No. (See product label)

## SPECIFICATION

<b>Product Overview</b>	This outstanding recombinant Protein G has the albumin binding domain deleted providing very clean immunoglobulin purifications. It is coupled to highly cross-linked agarose at 2 mg rProtein G per ml beads using cyanogen bromide activation. The combination provides very superior performance binding 20 mg of human IgG per ml beads under static conditions. Binding under flow will be less depending on the flow rate for all Protein A and Protein G products. High flow rates are possible with this highly cross-linked agarose product under gravity flow, but it is not designed to pump under high pressure.
<b>Ligand Density</b>	approximately 2 mg Protein G per ml of drained gel
<b>Dynamic Binding Capacity</b>	approximately 18 mg human IgG per ml of drained gel (calculated as the amount of human IgG adsorbed to the gel before flow exceeded 1% of the absorbance of the ingoing solution at 30 cm/hour and a 0.92 mg/ml sample concentration)
<b>Bead Structure</b>	4% highly cross-linked agarose
<b>Bead Size Range</b>	45 to 185 $\mu$ m
<b>Mean Bead Size</b>	approximately 90 $\mu$ m
<b>Maximum Linear Flow Rate</b>	>1300 cm/hour at 0.05 MPa (0.5 bar) in an XK 16/20 column, bedheight 5 cm
<b>Maximum Operating</b>	0.1 MPa (1 bar, 14 psi)

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

<b>Backpressure</b>	
<b>pH Working Range</b>	2 to 9 (NOTE: Protein G may hydrolyse at low pH)
<b>pH Stability</b>	Long term storage and cleaning-in-place - 3 to 9
<b>Chemical Stability</b>	IgG binding capacity and recovery maintained after storage for (a) 7 days at 37°C in 1M acetic acid (pH 2.0), 2 mM sodium phosphate, 1% SDS (pH 7.0), 6 M guanidine-HCl, 70% ethanol or (b) 2 hours at room temperature in 0.1 M HCl, pH 1.0, 8 M urea, pH 10.5, 0.1 M Glycine-NaOH, pH 11
<b>Physical stability</b>	Negligible volume variation due to changes in pH or ionic strength
<b>Sanitization</b>	Sanitize column using 70% ethanol
<b>Formulation</b>	Provided as a 50% aqueous suspension of Protein G agarose in phosphate buffer saline containing 0.08% sodium azide.
<b>Storage</b>	Store at 4-8°C in a suitable bacteriostat. DO NOT FREEZE. Products are stable for one year from purchase when stored properly
<b>Ship Conditions</b>	Ship ambient temperature, do not freeze, refrigerate upon arrival

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA