Active Recombinant Peptostreptococcus magnus Protein L

Cat. No. Protein L-56P **Lot. No.** (See product label)

SPECIFICATION

Product Overview	This product is a recombinant Protein L expressed in E.coli. It is derived from Peptostreptococcus magnus and has an affinity for the Kappa light chain of antibodies. The affinity sites are located in regions I, III, and IV of the light chain. The recombinant Protein L can widely bind to antibodies of various sources and subclasses, including those from humans, mice, rats, rabbits, and chickens. It can also bind to single-chain antibodies and Fab fragments, but it does not bind to immunoglobulins derived from cows, goats, or sheep.
Species	Peptostreptococcus magnus
Source	E.coli
Purity	≥ 95% by SDS-PAGE
Binding Capacity	> 2 mg Mouse IgG/mg
Advantages	1. It can bind antibodies and Fab fragments of various sources and subclasses. 2. It can be easily coupled to magnetic beads or purified media.
Protein Content	≥ 2.5 mg
Usage	Magnetic bead conjugation Preparation of buffers Conjugation buffer: 0.1M Borate buffer, pH 9.5; Catalyst: 3M ammonium sulfate solution (prepared with 0.1M Borate buffer, pH 9.5); Blocking solution: 4% triethanolamine, 0.5% casein, 0.05% PC300, 0.05% BND-10; Washing solution: TBS-T (25mM Tris-HCl, pH 7.2, 0.15M NaCl,

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0.05% Tween 20); Storage buffer: Tris 6.6g/L, BSA 0.5g/L, PC300 0.5 ml/L, BND-10 0.5 ml/L, pH 6.5. Conjugation process Take out the magnetic beads and the buffer solution, and equilibrate them to room temperature. Turn on the thermostatic oscillator and set it to 37 centigrade. Mix the magnetic beads thoroughly, pipette 10mg of the magnetic beads into a centrifuge tube. Perform magnetic adsorption until the supernatant is clear. Remove the supernatant, add 1mL of the conjugation buffer solution for washing, and repeat this operation 2 more times. Add 300 μL of the conjugation buffer solution to resuspend the washed magnetic beads, and vortex-mix for 10 seconds. Add 0.2mg of the recombinant Protein L to it. The conjugation ratio of the recombinant Protein L to the magnetic beads is 20 μg/mg. Add 333 μL of the catalyst, and supplement the conjugation buffer solution to make the total volume reach 1mL. After vortex-mixing for 10 seconds, carry out a rolling reaction at 37 centigrade for 18-20 hours. After the conjugation reaction is completed, perform magnetic adsorption until the supernatant is clear. Remove the supernatant, add 1mL of the blocking solution, vortex-mix for 10 seconds, and then carry out a rolling reaction at 37 centigrade for 20 hours. After the reaction is finished, perform magnetic adsorption until the supernatant is clear, and remove the supernatant. Add 1mL of the washing solution, vortex-mix for 10 seconds, perform magnetic adsorption until the supernatant is clear, remove the supernatant, and repeat this operation 2 more times. After the washing is completed, add 1mL of the storage buffer solution, prepare its concentration to be 10 mg/mL, and store it at 2-8 centigrade. Purification of antibodies or Fab fragments (The system can be linearly scaled up) Adsorption Add 5mg of the conjugated Protein L magnetic beads (pre-washed with PBS) and an appropriate amount of the solution containing the antibody with Kappa light chain or Fab fragments to be purified into 10 ml of PBS solution, and incubate with shaking at room temperature for 30 minutes. Washing Remove the supernatant by magnetic attraction, and wash the magnetic beads twice with 10ml of PBS. Elution Remove the supernatant by magnetic attraction, add 2 mL of 0.1M glycine-hydrochloric acid buffer with a pH of 3.0 and incubate for 3 to 5 minutes. Collect the supernatant by magnetic

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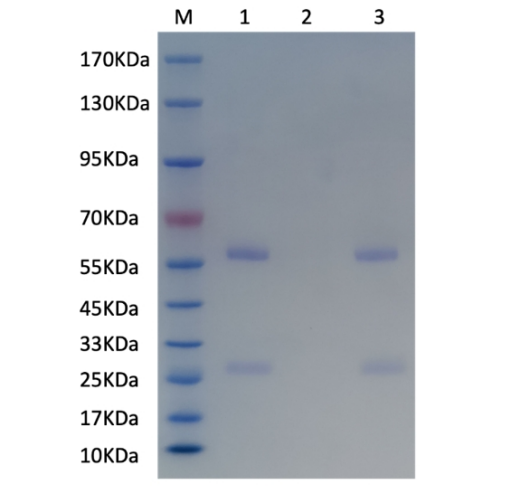
	attraction, adjust the pH to 7.2-7.4 with 1M Tris at a pH of 9.0, and then concentrate the solution or perform buffer replacement.
Applications	Purification of antibodies containing Kappa light chains and Fab fragments
Note	1. After reconstitution, try to avoid repeated freeze-thaw cycles for this product; 2. Please wear lab coat and disposable gloves when using; 3. This product should not be used directly for clinical diagnosis and treatment.
Stability	This product should be stored at 2-8 centigrade and can be stored for at least 6 months.
Storage	At 2-8 centigrade
Storage Buffer	PBS
Shipping	Ice pack
SDS-PAGE	

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Adsorption and elution of Mouse IgG by magnetic beads coupled with protein L M: Marker Lane 1: Mouse IgG Lane 2: Washing liquid of Protein L magnetic beads Lane 3: Eluent of Protein L magnetic beads

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