

Version: 02  
Update: 07/28/2021

## DATASHEET

### iFluor488-Protein L

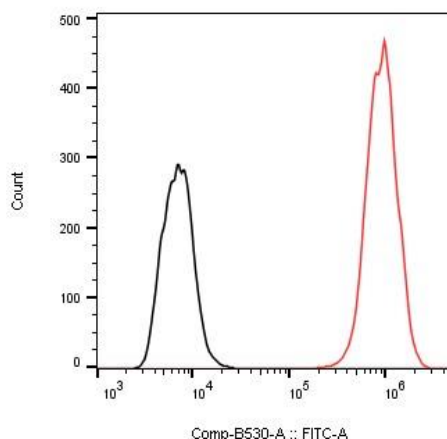
**Cat. No.:** M00921-500; M00921-1

**Size:** 500 µg / 1 mg

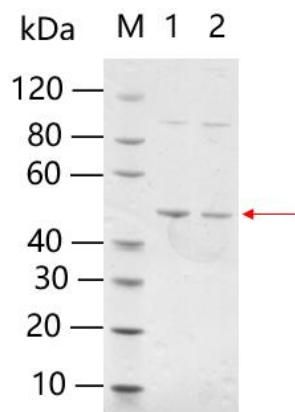
#### Product Introduction

<b>Species:</b>	Peptostreptococcus magnus
<b>Tag:</b>	His Tag
<b>Conjugate:</b>	iFluor488
<b>Purity:</b>	> 90% as analyzed by SDS-PAGE
<b>Expression System:</b>	E. coli
<b>Theoretical Molecular Weight:</b>	42 kDa
<b>Apparent Molecular Weight:</b>	~45 kDa, on SDS-PAGE under reducing conditions
<b>Application:</b>	The optimal dilution ratio should be determined by the end user for specific applications. Flow cytometry analysis: 1:100-1:200
<b>Formulation:</b>	Lyophilized from a solution in PBS, pH 7.4, containing 1% BSA and 0.02% sodium azide.
<b>Reconstitution:</b>	Reconstitute the lyophilized powder in deionized water up to 0.5 mg/ml.
<b>Storage &amp; Stability:</b>	Upon receiving, this product remains stable up to 12 months at -20°C or below. Upon reconstitution, the product can be stored for 2-3 weeks at 2-8°C or 3 months at -20°C. Avoid repeated freeze-thaw cycles.

#### Data Images



VHH expression positive cell line was stained with negative control (black curve) or Protein L labeled with iFluor488 at 5 µg/mL (red curve).



Lane 1: 1 µg of Protein L, reducing(R)  
> 90% as analyzed by SDS-PAGE

## Background

**Target Background:** Protein L is a cell surface protein from *Peptostreptococcus magnus* that binds to the variable light chains (kappa chain) of immunoglobulins without interfering with antigen binding. In contrast to IgG-binding proteins, such as protein A and protein G, which bind to the Fc region of immunoglobulins, protein L can be used for the detection and purification of mammalian kappa light chain antibodies of all classes. Since no part of the heavy chain is involved in the binding interaction, Protein L binds a wider range of antibody classes than Protein A or G. Protein L binds to representatives of all antibody classes, including IgG, IgM, IgA, IgE and IgD. Single chain variable fragments (scFv) and Fab fragments also bind to Protein L.

**Synonyms:** RPL; Protein L

### References:

1. Björck, L. "Protein L. A novel bacterial cell wall protein with affinity for Ig L chains." *The Journal of Immunology* 140.4 (1988): 1194-1197.
2. Kastern, William, U. Sjöbring, and L. Björck. "Structure of peptostreptococcal protein L and identification of a repeated immunoglobulin light chain-binding domain." *Journal of Biological Chemistry* 267.18 (1992): 12820-12825.
3. Åkerström, B., and L. Björck. "Protein L: an immunoglobulin light chain-binding bacterial protein: characterization of binding and physicochemical properties." *Journal of Biological Chemistry* 264.33 (1989): 19740-19746.

**For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.**