

## Certificate of Analysis

---

Product Name: Ipilimumab  
Cat. No.: GC31951  
Batch No.: 1  
Chemical Name:

### PHYSICAL AND CHEMICAL PROPERTIES

Cas. No.: 477202-00-9  
Molecular Formula:  $C_{6742}H_{9972}N_{1732}O_{2004}S_{40}$   
Molecular Weight: 145313.36

### ANALYTICAL DATA

Appearance: Colorless to light yellow (Solution)  
Purity(SEC-HPLC): 99.88%  
Concentration: 4.0 mg/mL  
Potency: 1.395  
Endotoxin Level: <1 EU/mg  
Sterility: Sterilized via a 0.22 µm filter and packaged aseptically  
Storage and Handling: PBS, pH 7.2  
Codon Optimization: Yes  
Expression System: CHO stable cell line  
Purification: Protein was obtained from supernatant, followed by AC, CEX and SEC  
Storage and Handling: Store at -80°C. Aliquots should be stored at the same temperature after first use to avoid multiple freezethaws  
Conclusion: The product has been tested and complies with the given specifications.

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: (626) 353-8530 Fax: (626) 353-8530 E-mail: tech@glpbio.com  
Address: 10292 Central Ave. #205, Montclair, CA, USA