

Sigma-Aldrich®

# Probumin® Bovine Serum Albumin (BSA)

The industry standard for performance



**level**  
Discovering  
new boundaries

進階生物科技股份有限公司

服務專線：0800-251302

The life science business of Merck  
operates as MilliporeSigma in the  
U.S. and Canada.

**MERCK**

Albumin is one of the most extensively utilized proteins in the medical industry. Its availability, inherent stability and ligand binding ability make albumin an essential component in the development and production of many diagnostic tests.

With over 60 years of protein fractionation expertise, Merck is a very experienced manufacturer of high-quality albumin products for the diagnostic and cell culture markets. Our collaborations with the earliest pioneers of protein fractionation give us the unique perspective of understanding the significance of various process strategies and of utilizing this knowledge to develop albumin products customized for different applications. Today, we continue to advance the science of bulk albumin purification. Our proprietary heat shock/cold solvent fractionation technology and state-of-the-art facility enable us to deliver products with outstanding quality, performance and safety.

### What makes Merck's Probumin® stand out from the crowd?

#### High quality and reliability

- Assurance of consistency in performance and supply

#### Over 60 years of experience

- Track record of success in diagnostic and veterinary applications

#### Heat shock/solvent fractionation process

- Proprietary process for improved purity and effectiveness in your application

#### Serum sourcing

- Exclusively from U.S. cattle under 30 months of age

#### Proprietary virus reduction process step

- To further assure safety and purity of Probumin® products

#### Broad product portfolio

- The right albumin product for your application
- Your source for cell culture supplementation and services
- Various pack sizes available

### High Quality and Reliability

The high quality of our bovine albumin is demonstrated in our track record of success. Today, companies throughout the world depend on Merck BSA products for the manufacture of numerous FDA- and EMA-approved biologics, medical devices, animal vaccines and diagnostic assays.

Merck's production facility in Kankakee, IL operates under an ISO9001:2008 quality system and follows

(EU) No. 142/2011 facility numbers in compliance with European regulations.

Each lot of BSA is accompanied by a Certificate of Analysis detailing complete product testing and specifications. Merck can provide an EDQM Certificate of Suitability upon request; Certificates of Origin are also available.

### Raw Material Sourcing

Products of bovine origin carry an inherent risk of contamination with certain adventitious agents and bovine spongiform encephalopathy (BSE). To ensure the most comprehensive mitigation of these risks, Merck follows strict guidelines for the procurement of raw materials. The raw material used to manufacture Probumin® BSA products in our Kankakee facility is exclusively derived from U.S.-sourced cattle that are under 30 months of age. All ruminant materials used for manufacture originate from non-BSE-related herds. Animals receive both ante- and post-mortem veterinary health inspection, and the abattoir is a USDA-licensed facility. The record of each raw material is incorporated into the manufacturing records and veterinary certificates are maintained on file at the manufacturing facility.

The U.S. is recognized as having negligible BSE risk in accordance with Chapter 11.4 of the OIE Terrestrial Code (85th General Session of World Assembly, May 2017).

### Heat Shock/Solvent Fractionation Process

BSA was developed as an inexpensive alternative to human serum albumin beginning in World War II. Over the last 60 years, as the diversity of applications using albumin have multiplied, scientists have devised a variety of methods to isolate and purify commercial quantities of BSA. Merck employs a proprietary heat shock/solvent fractionation process. Our purification technology improves the yield, purity and effectiveness of BSA.

In an independent study, our albumin heat shock process was evaluated for the removal of transmissible spongiform encephalopathy (TSE) agents. It was concluded that our proprietary purification procedure for bovine albumin products was very effective for the removal of TSE agents with no recovery of spiked agent in samples. More data is available upon request.

### International Distribution and Sales

Our bovine albumin is used in research and manufacturing worldwide. With our dedicated customer service team, it is our goal to continuously improve and perfect on-time and accurate product delivery through our global product distribution network and our experienced international sales team.

Probumin® Application Table

	Cell Culture	Microbial Culture	Molecular Biology	EIA Systems	RIA Systems	Serology	Antibody Enhancement
<b>BSA Powders</b>							
81-001	Probumin® Crystallized		•	•	•	•	
81-003	Probumin® Universal Grade	•		•	•	•	•
81-024	Bovine Albumin Sulphydryl Modified			•			
81-053	Bovine Albumin Fraction V, pH 5.2					•	•
81-065	Probumin® Microbiological Grade	•					
81-066	Probumin® Reagent Grade			•	•	•	
81-068	Probumin® Media Grade	•	•				
82-002	Probumin® Fatty Acid Free	•		•	•	•	•
82-045	Probumin® Diagnostic Grade		•	•	•	•	•
84-022	Bovine Albumin Biotechnology Grade, Low Endotoxin	•					
82-047	Probumin® Bovine Serum Albumin Biotech Grade	•					
82-067	Bovine Albumin Protease Free, Fatty Acid Poor			•	•		
82-100	Probumin® Life Science Grade	•	•	•	•	•	
82-150	Probumin® NZ Bovine Serum Albumin Powder (New Zealand Sourced)	•					
84-065	Probumin® Vaccine Grade	•					
5001P	Probumin® BSA Powder Sampling Kit	•	•	•	•	•	•
<b>BSA Solutions</b>							
81-007	Probumin® Micro Solution	•		•	•	•	•
81-013	Bovine Albumin 30% Solution, Immunohematology Grade			•	•	•	•
81-070	Probumin® Manufacturing Solution	•		•	•	•	•
81-077	Probumin® PE Solution	•		•	•	•	•
81-078	Probumin® PE Immunohematology Solution	•		•	•	•	•
81-079	Probumin® PE Low NaCl Solution			•	•	•	•
81-096	MOD-U-CYTE® VIII Media and Antisera Diluent			•	•	•	•
81-177	Probumin® PE Euro Solution			•	•	•	•
82-046	Probumin® Diagnostic Solution		•	•	•		•
5001S	Probumin® BSA Liquid Sampling Kit	•	•	•	•	•	•

Probumin® Application Table (continued)

	Blood Bank Reagents	Binding, Transport Studies	Perfusion Studies	Protein Base, Filter/Diluent	Protein Standard	Molecular Weight Standard	Adjuvant for Veterinary Use
<b>BSA Powders</b>							
81-001	Probumin® Crystallized			•	•		•
81-003	Probumin® Universal Grade	•	•	•			
81-024	Bovine Albumin Sulphydryl Modified			•	•		
81-053	Bovine Albumin Fraction V, pH 5.2	•					
81-065	Probumin® Microbiological Grade			•			
81-066	Probumin® Reagent Grade	•	•		•		•
81-068	Probumin® Media Grade	•	•				
82-002	Probumin® Fatty Acid Free	•	•				
82-045	Probumin® Diagnostic Grade	•					
84-022	Bovine Albumin Biotechnology Grade, Low Endotoxin						
82-047	Probumin® Bovine Serum Albumin Biotech Grade	•					
82-067	Bovine Albumin Protease Free, Fatty Acid Poor						
82-100	Probumin® Life Science Grade	•	•		•	•	•
84-065	Probumin® Vaccine Grade						•
5001P	Probumin® BSA Powder Sampling Kit	•	•	•	•	•	•
<b>BSA Solutions</b>							
81-007	Probumin® Micro Solution	•		•		•	
81-013	Bovine Albumin 30% Solution, Immunohematology Grade	•		•			
81-070	Probumin® Manufacturing Solution	•		•		•	
81-077	Probumin® PE Solution	•		•			
81-078	Probumin® PE Immunohematology Solution	•		•			
81-079	Probumin® PE Low NaCl Solution	•		•			
81-096	MOD-U-CYTE® VIII Media and Antisera Diluent	•		•			
81-177	Probumin® PE Euro Solution	•		•			
82-046	Probumin® Diagnostic Solution		•			•	
5001S	Probumin® BSA Liquid Sampling Kit	•	•	•		•	

# NOW Available:

## Probumin® BSA Sampling Kits

Test the most widely used grades of BSA in one convenient kit. Kits are available in two formats: lyophilized powder or 30% solution. Each kit is packaged containing four different grades of our most popular BSA products. This is a perfect fit for the development of new assays in R&D. All BSA grades included in the kit can be scaled to meet the customer's demand.





## 進階生物科技股份有限公司

台北總公司 02-26959935 免付費專線 0800251302 傳真 02-26958373  
經銷商 榮陽長庚區·康寧 02-28200822 [www.level.com.tw](http://www.level.com.tw)



進階官網



FB粉絲團