

Recombinant Bovine Serum Albumin (rBSA)

PROTEINS AND BLOCKING AGENTS

Cat. No 6500

Kementec's rBSA is especially suited for manufacturers and laboratories looking for a reliable, animal-free BSA alternative with superior blocking performance.

Why use our rBSA?



Superior blocker

In ELISA-based evaluations, rBSA has shown significantly improved performance as a blocking agent compared to traditional BSA. The blocking efficiency is typically up to 100 times higher, depending on the assay conditions and significantly improving background interference.

Consistent performance

Traditional BSA may vary between lots due to its animal origin. rBSA is produced through a controlled recombinant process, improving lot-to-lot variation and signal-to-noise ratio, consistent quality, and steady assay reproducibility.

Animal-free origin

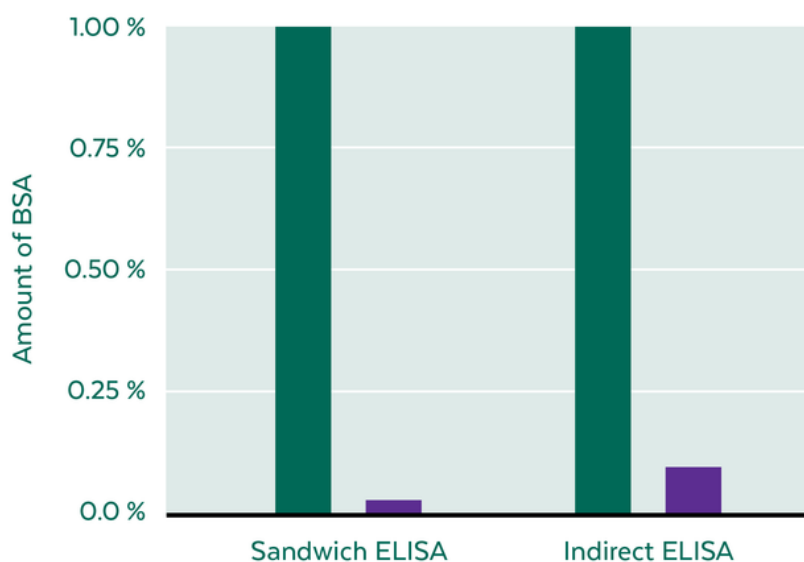
rBSA is not extracted from bovine serum. This simplifies regulatory concerns, eases cross-border paperwork and improves assay reproducibility.

Reduced contamination risk

As rBSA is not serum-derived, contaminants that may be present in bovine blood products are avoided and reproducibility is enhanced.

No E. coli-related contamination

rBSA is expressed in yeast, avoiding concerns related to bacterial DNA contamination and endotoxins associated with E. coli expression systems.



rBSA used as a blocking agent in ELISA

Amount of Kementec's rBSA (0.01 % & 0.03 %) compared to animal-derived BSA (1 %), needed to obtain a similar signal in various ELISA setups.

- Animal-derived BSA
- Kementec's rBSA

What is rBSA?

Traditional Bovine Serum Albumin, BSA is purified from bovine serum. While animal-derived BSA is well established, it may present challenges related to lot-to-lot variation, potential serum-derived contaminants, regulatory complexity, and animal-origin documentation requirements.

Recombinant Bovine Serum Albumin, rBSA, offers a novel alternative. Produced using yeast expression technology, rBSA provides a highly consistent, animal-free albumin solution designed for improved reproducibility and reliable assay performance.

As rBSA is not extracted from animal serum, it reduces variability associated with biological raw materials and supports a more controlled manufacturing. Due to the very active nature of the product, rBSA can be utilized in much lower amounts than traditional BSA.

Applications

rBSA can be used in many applications where traditional BSA is currently used, including:

- MTP assays (ELISA)
- Lateral-flow assays (LFA)
- Chemiluminescence assays (CLIA)
- Western Blotting (WB)
- Immunohistochemistry (IHC)
- Bead based assays
- Immunoblotting
- Other Immunoassays
- Blocking of microplates and membranes
- Protein and enzyme stabilization



Our immunoassay solutions are developed in order to create a safer work environment while helping our customers fulfill significant regulatory requirements.

We call it ECO-TEK®