V1.1 Revised 07/06/2020

ELISA Blocking Buffer (Non-Mammalian)

Reduces background using small, non-mammalian blocking agents.

ELISA Blocking Buffer (Non-Mammalian) utilizes a non-mammalian protein extract and small molecular stabilizers to provide a high degree of blocking effciency. It is designed for antigen-down and sandwich immunoassays with high background problems. ELISA Blocking Buffer (Non-Mammalian) is a heterogeneous mixture of small molecules capable of blocking the unoccupied regions of the polystyrene plate wells that are not sterically accessible to larger, traditional mammalian blocking agents. This minimizes non-specific binding interactions and significantly reduces background noise, increasing the sensitivity of the assay. These small blocking molecules also stabilize the adsorbed proteins for improved retention of antigenicity or antibody activity after drying and long-term storage. In addition, the small size of these unique blocking agents results in minimal steric hindrance to key epitope regions of coated proteins, which prevents masking of small coated peptides, enhancing their specific antigenic signal.

Since ELISA Blocking Buffer (Non-Mammalian) utilizes a non-mammalian protein blocking agent, it is antigenically foreign to most mammalian immune systems. In antigen-down ELISA formats used to detect antigen-specific antibodies, this reduces the possibility of false positives generated from endogenous antibodies in the sample reacting with plate blocking proteins. ELISA Blocking Buffer (Non-Mammalian) is particularly useful when working with human, swine, and bovine serum samples, as minimal interaction between blocking molecules and mammalian serum matrices results in lower backgrounds. ELISA Blocking Buffer (Non-Mammalian) contains an antimicrobial agent for room temperature blocking of the plate and for long-term storage of the dried plate at 2-8°C.

When preparing plates, the antibody or antigen is typically coated using 50-200µL of coating solution per well. After coating, plates are normally washed to remove unbound proteins and then blocked using a larger volume of blocking buffer than was used for coating, such as 300 µL per well. This ensures that all uncoated regions inside the well are blocked. A 96-well plate blocked using this method will require 28.8mL of blocking solution. Allow approximately 10% extra blocking buffer to account for losses during pipetting.



Antibody Sandwich ELISA blocker coated antibody target antigen antibody-enzyme conjugate

ELISA Blocking Buffer (Non-Mammalian)

Size	Catalog#
100 mL	LS-M17-100
500 mL	LS-M17-500
1 L	LS-M17-1

INSTRUCTIONS:

- 1. Coat antibody or antigen onto the ELISA plate (use coating buffer catalog# LS-M25 or LS-M33).
- 2. Incubate 8-24 hours at room temperature.
- 3. Aspirate the coating solution.
- 4. Wash plate twice with ELISA Wash Buffer (catalog# LS-M27).
- 5. Block the uncoated regions of the ELISA plate by pipetting 300-400 μL of blocking bufferinto each well. Always use a greater volume of blocking buffer than was used for the coating solution.
- 6. Incubate 8-24 hours.
- 7. Aspirate the blocking buffer; do not wash.
- 8. Run the assay immediately, or dry the plate for long-term storage and seal in a foil bag with a desiccant pack.

For more ELISA protocols and information, please visit www.lsbio.com

SPECIFICATIONS:

- · Light yellow liquid
- 1X ready to use
- pH 7.2-7.6

STORAGE:

- 24 months at 2-8°C
- 1 week at room temperature

SAFETY & USAGE:

- Contains ≤ 0.1% sodium azide
- SDS available upon request
- Not for human or drug use
- For research use only



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