

PRODUCT DATASHEET

ELISA Block, Non-mammalian**PAGE 1 of 1**

E015.04 Revision 1

Last Modified 11/11/2024

ELISA BLOCK**Size Catalog #**

(formerly known as Neptune™ Block)

100 mL #62

Reduces background using small, non-mammalian 500 mL #63

1 L #64

blocking agents.

ELISA Block utilizes a non-mammalian protein extract and small mo- INSTRUCTIONS:

lecular stabilizers to provide a high degree of blocking efficiency. It is

- 1. Coat antibody or antigen onto the ELISA plate designed for antigen-down and antibody sandwich immunoassays with (use coating buffer catalog #645 or #6248).

high background problems. ELISA Block is a heterogeneous mixture

- 2. Incubate covered plate 8-24 hours at room of small molecules capable of blocking the unoccupied regions of the temperature.

polystyrene plate wells that are not sterically accessible to larger, tradi-

- 3. Aspirate the coating solution.

tional mammalian blocking agents. This minimizes non-specific binding

- 4. Wash plate twice with ELISA Wash Buffer (cata- interactions and significantly reduces background noise, increasing the log #652).

sensitivity of the assay. These small blocking molecules also stabilize

- 5. Block the uncoated regions of the ELISA plate

the adsorbed proteins for improved retention of antigenicity or antibody by pipetting 300-400 µL of blocking buffer activity after drying and long-term storage. In addition, the small size into each well. Always use a greater volume of of these unique blocking agents results in minimal steric hindrance to blocking buffer than was used for the coating key epitope regions of coated proteins, which prevents masking of small solution.

coated peptides, enhancing their specific antigenic signal.

- 6. Incubate 8-24 hours.

Since ELISA Block utilizes a non-mammalian protein blocking agent, it is 7. Aspirate the blocking buffer; do not wash.

antigenically foreign to most mammalian immune systems. In antigen-

- 8. Run the assay immediately, or dry the plate for

down ELISA formats used to detect antigen-specific antibodies, this long-term storage and seal in a foil bag (catalog reduces the possibility of false-pos- #6288) with a desiccant pack (catalog #6289).

itives generated from endogenous

For more ELISA protocols and information,

Antigen-Down ELISA

antibodies in the sample reacting please visit www.pel-freez.com.

with plate blocking proteins. ELISA

SPECIFICATIONS

Block is particularly useful when

- Light yellow liquid

working with human, swine, and

- 1X ready to use

bovine serum samples, as minimal • pH 7.2-7.6 interaction between ELISA Block's blocker

target antibody-enzyme STORAGE

blocking molecules and mamma- conjugate coated antibody

- antigen 24 months at 2-8°C lian serum matrices results in lower

-

1 week at room temperature backgrounds. ELISA Block contains

Antibody Sandwich ELISA

an antimicrobial agent for room SAFETY & USAGE

temperature blocking of the plate •

Includes $\leq 0.1\%$ sodium azide as an anti- and for long-term storage of the microbial agent.

- SDS available at www.pel-freez.com.

dried plate at 2-8°C.

- Product intended for research use or for fur-

When preparing plates, the anti- ther manufacturing into in-vitro diagnostics body or antigen is typically coated reagents only.

using 50-200 μL of coating solution • Not intended for use in human or therapeutics purposes.

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 un-coated regions inside the well are blocked sufficiently.

Figures

Antigen-Down ELISA



Antibody Sandwich ELISA



blocker coated target antibody-enzyme antibody antigen conjugate

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made by one of its founders, Brian W. Lee, Ph.D in the development of this product, including TOLL-FREE LOCAL the creation and illustration of its strategy and protocol.

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