

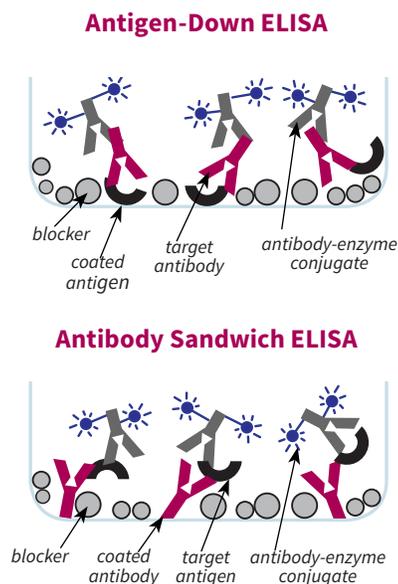
# General Block

## Reduces background using a mixture of blocking agents, including BSA.

General Block contains mammalian protein blocking agents to provide adequate blocking strength for most immunoassays, including monoclonal and polyclonal antibody capture ELISAs and peptide and protein antigen-down ELISAs. This unique blocking buffer contains a heterogeneous mixture of proprietary protein stabilizers and small molecules (including BSA) that block the uncoated regions of the plate. Blocking with ICT's General Block minimizes non-specific binding interactions during the assay process to reduce background noise and enhance the sensitivity of the assay.

General Block provides a microhydrated environment to stabilize the adsorbed protein. This prevents degradation of the coated material and improves retention of protein antigenicity or antibody activity during long-term storage. General Block 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 50-200  $\mu\text{L}$  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  $\mu\text{L}$  per well. This ensures that all uncoated regions inside the well are blocked. A 96-well plate blocked using this method will require 28.8 mL of blocking solution. However, allow approximately 10% extra blocking buffer to account for losses during pipetting.



### BRIGHT MINDS, BRIGHT SOLUTIONS.

ImmunoChemistry Technologies, LLC gratefully acknowledges the significant contributions made by one of its founders, Brian W. Lee, Ph.D in the development of this product, including the creation and illustration of its strategy and protocol.

### GENERAL BLOCK

Size	Catalog #
100 mL	#632
500 mL	#633
1 L	#640
10 L	#659

### INSTRUCTIONS:

1. Coat antibody or antigen onto the ELISA plate (use coating buffer catalog #645 or #6248).
2. Incubate 8-24 hours at room temperature.
3. Aspirate the coating solution.
4. Wash plate twice with ELISA Wash Buffer (catalog #652).
5. Block the uncoated regions of the ELISA plate by pipetting 300-400  $\mu\text{L}$  of blocking buffer into 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 (catalog #6288) with a desiccant pack (catalog #6289).

For more ELISA protocols and information, please visit [www.immunochemistry.com](http://www.immunochemistry.com).

### SPECIFICATIONS:

- Clear 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  $\leq 0.1\%$  sodium azide
- SDS available at [immunochemistry.com](http://immunochemistry.com)
- Not for human or drug use
- For research use only

*Build a better assay with ELISA Solutions from ImmunoChemistry Technologies.*



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# Neptune Block

## Reduces background using small, non-mammalian blocking agents.

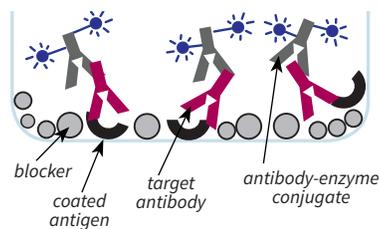
Neptune Block utilizes a non-mammalian protein extract and small molecular stabilizers to provide a high degree of blocking efficiency. It is designed for antigen-down and antibody sandwich immunoassays with high background problems. Neptune Block is a heterogeneous mixture of small molecules capable 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 Neptune Block 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.

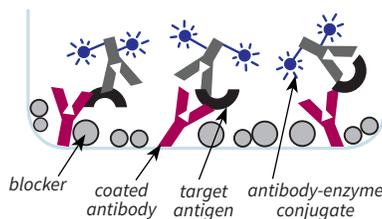
Neptune Block is particularly useful when working with human, swine, and bovine serum samples, as minimal interaction between Neptune Block's blocking molecules and mammalian serum matrices results in lower backgrounds. Neptune Block contains an antimicrobial agent for room temperature blocking of the 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 50-200 µL 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 sufficiently.

### Antigen-Down ELISA



### Antibody Sandwich ELISA



## NEPTUNE BLOCK

Size	Catalog #
100 mL	#62
500 mL	#63
1 L	#64
10 L	#660

## INSTRUCTIONS:

1. Coat antibody or antigen onto the ELISA plate (use coating buffer catalog #645 or #6248).
2. Incubate covered plate 8-24 hours at room temperature.
3. Aspirate the coating solution.
4. Wash plate twice with ELISA Wash Buffer (catalog #652).
5. Block the uncoated regions of the ELISA plate by pipetting 300-400 µL of blocking buffer into 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 (catalog #6288) with a desiccant pack (catalog #6289).

For more ELISA protocols and information, please visit [www.immunochemistry.com](http://www.immunochemistry.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:

- Includes ≤0.1% sodium azide as an antimicrobial agent.
- SDS available at [immunochemistry.com](http://immunochemistry.com).
- Product intended for research use or for further manufacturing into *in-vitro* diagnostics reagents only.
- Not intended for use in human or therapeutics purposes.



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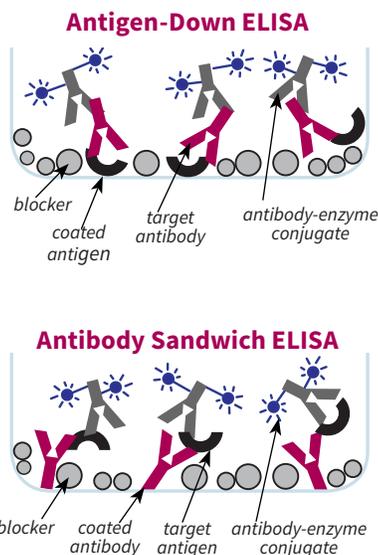
# SynBlock™

## Reduces background using synthetic blocking molecules.

SynBlock™ is designed to avoid false positives associated with animal proteins (e.g., BSA) and eliminate non-specific background noise in antibody-sandwich and antigen-down ELISAs without the use of conventional protein additives. By depositing inert, synthetic blocking molecules onto the plate, SynBlock reduces non-specific binding of enzyme-labeled conjugates to the microtiter plate, enhancing the sensitivity of the assay. Its synthetic blockers also stabilize coated protein for improved retention of antigen epitope or antibody binding activity during long-term storage. SynBlock contains an antimicrobial agent for room temperature blocking and long-term storage of dried plates at 2-8°C.

SynBlock works on all types of polystyrene plates except Immulon® II microplates. When blocking with SynBlock, ICT recommends Corning® 96-Well EIA/RIA Stripwell™ microplates (ICT catalog #25).

When preparing plates, the antibody or antigen is typically coated using 50-200 µL 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 28.8 mL of blocking solution. Allow approximately 10% extra blocking buffer to account for losses during pipetting.



*Build a better assay with ELISA Solutions from ImmunoChemistry Technologies.*

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### NEPTUNE BLOCK™

Size	Catalog #
100 mL	#641
500 mL	#642
1 L	#643
10 L	#661

### INSTRUCTIONS:

1. Coat antibody or antigen onto the ELISA plate (use coating buffer catalog #645 or #6248). Do not use Immulon® II plates.
2. Incubate 8-24 hours at room temperature.
3. Aspirate the coating solution.
4. Wash plate twice with ELISA Wash Buffer (catalog #652).
5. Block the uncoated regions of the ELISA plate by pipetting 300-400 µL of blocking buffer into 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 (catalog #6288) with a desiccant pack (catalog #6289).

For more ELISA protocols and information, please visit [www.immunochemistry.com](http://www.immunochemistry.com).

### SPECIFICATIONS:

- Clear 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 at [immunochemistry.com](http://immunochemistry.com)
- Not for human or drug use
- For research use only



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# Alternative Block

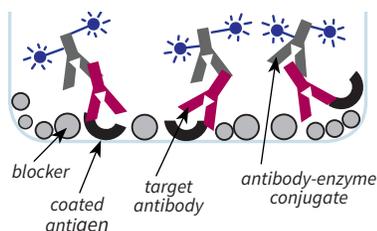
## Reduces backgrounds without using proteins or detergents.

Alternative Block is a protein-free, detergent-free ELISA blocking buffer. This unique blocking buffer contains a heterogeneous mixture of proprietary blockers and synthetic stabilizers that block the uncoated regions of the plate without the use of conventional cross-reactive protein additives or detergents.

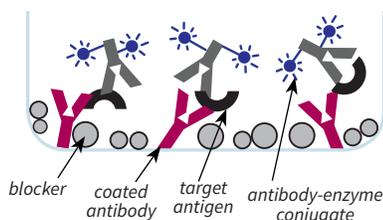
Alternative Block minimizes non-specific binding interactions and reduces background noise. It also stabilizes the coated protein during long-term storage by providing a microhydrated environment for improved retention of antigen epitope and antibody binding activity. Room temperature blocking of the plate and long-term refrigerated storage of dried plates are made possible by an antimicrobial component.

Alternative Block is suitable for use in most monoclonal and polyclonal antibody capture ELISA tests (also known as sandwich ELISAs) and peptide/protein antigen-down ELISAs. When preparing plates, the antibody or antigen is typically coated using 50-200  $\mu\text{L}$  of coating solution per well. After coating, plates are washed to remove unbound proteins and then blocked using a larger volume of blocking buffer than was used for coating, such as 300  $\mu\text{L}$  per well. This ensures that all uncoated regions inside the well are blocked. A 96-well plate blocked using this method will require 28.8 mL of blocking solution. Allow 10% extra blocking buffer to account for losses during pipetting.

### Antigen-Down ELISA



### Antibody Sandwich ELISA



## ALTERNATIVE BLOCK

Size	Catalog #
100 mL	#6299
500 mL	#6300
1 L	#6301
10 L	#6302

## INSTRUCTIONS:

1. Coat antibody or antigen onto the ELISA plate (use coating buffer catalog #645 or #6248).
2. Incubate covered plate 8-24 hours at room temperature.
3. Aspirate the coating solution.
4. Wash plate twice with ELISA Wash Buffer (catalog #652).
5. Block the uncoated regions of the ELISA plate by pipetting 300-400  $\mu\text{L}$  of blocking buffer into 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 (catalog #6288) with a desiccant pack (catalog #6289).

For more ELISA protocols and information, please visit [www.immunochemistry.com](http://www.immunochemistry.com).

## SPECIFICATIONS:

- Clear liquid
- 1X ready to use
- pH 7.1-7.6

## STORAGE:

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

## SAFETY & USAGE:

- Contains  $\leq 0.1\%$  sodium azide
- SDS available at [immunochemistry.com](http://immunochemistry.com)
- Product intended for research use or for further manufacturing into in-vitro diagnostics reagents only.
- Not intended for use in human or therapeutics purposes.

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# Monster Block

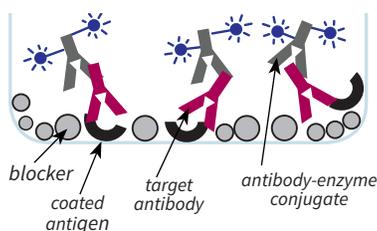
## Reduces backgrounds using non-mammalian protein-based blockers.

Monster Block provides a high degree of blocking efficiency through the use of a heterogeneous mixture of non-mammalian protein blocking agents. It minimizes non-specific binding interactions during the assay to reduce background noise, enhancing the sensitivity of the assay. It also provides a micro-hydrated environment to stabilize the coated protein during long-term storage through improved retention of antigen epitope and antibody binding activity. An antimicrobial component allows for stable blocking of plates at room temperature and for long-term refrigerated storage of the dried plate.

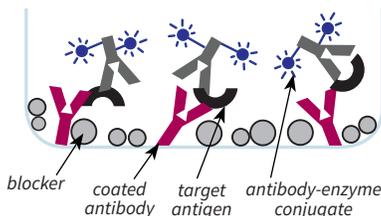
Monster Block is designed for antigen-down and sandwich ELISAs with high background problems and for assays that may cross-react with conventional mammalian blocking buffers. The non-mammalian formulation is antigenically foreign to most mammalian immune systems. In antigen-down ELISAs used to detect epitope-specific antibodies, and in sandwich ELISAs used to measure the antigen concentration in an unknown sample, the use of Monster Block reduces the possibility of false-positives generated from endogenous antibodies in the sample reacting with blocking proteins on the plate.

When preparing plates, the antibody or antigen is typically coated using 50-200  $\mu\text{L}$  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  $\mu\text{L}$  per well. This ensures that all uncoated regions inside the well are blocked. A 96-well plate blocked using this method will require 28.8 mL of blocking solution. However, allow for at least 10% extra blocking buffer volume to account for losses during pipetting.

### Antigen-Down ELISA



### Antibody Sandwich ELISA



## MONSTER BLOCK

Size	Catalog #
100 mL	#6295
500 mL	#6296
1 L	#6297
10 L	#6298

## INSTRUCTIONS:

1. Coat antibody or antigen onto the ELISA plate (use coating buffer catalog #645 or #6248).
2. Incubate covered plate 8-24 hours at room temperature.
3. Aspirate the coating solution.
4. Wash plate twice with ELISA Wash Buffer (catalog #652).
5. Block the uncoated regions of the ELISA plate by pipetting 300-400  $\mu\text{L}$  of blocking buffer into 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 (catalog #6288) with a desiccant pack (catalog #6289).

For more ELISA protocols and information, please visit [www.immunochemistry.com](http://www.immunochemistry.com).

## SPECIFICATIONS:

- Clear liquid
- 1X ready to use
- pH 7.1-7.6

## STORAGE:

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

## SAFETY & USAGE:

- Contains  $\leq 0.1\%$  sodium azide
- SDS available at [immunochemistry.com](http://immunochemistry.com)
- Product intended for research use or for further manufacturing into in-vitro diagnostics reagents only.
- Not intended for use in human or therapeutics purposes.

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