

Build a better assay with ELISA Solutions™ from ICT.

## 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 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. However, allow approximately 10% extra blocking buffer to account for losses during pipetting.

### SPECIFICATIONS

- Clear liquid
- 1X ready to use
- pH 7.2-7.6

### STORAGE

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

### WARNING



- Contains sodium azide at 0.05%.
- Harmful if swallowed.
- For research use only.
- Not for human or drug use.
- MSDS available at [www.immunology.com](http://www.immunology.com).

Check out more ELISA  
Solutions™ on our website  
[www.immunology.com](http://www.immunology.com)



### GENERAL BLOCK

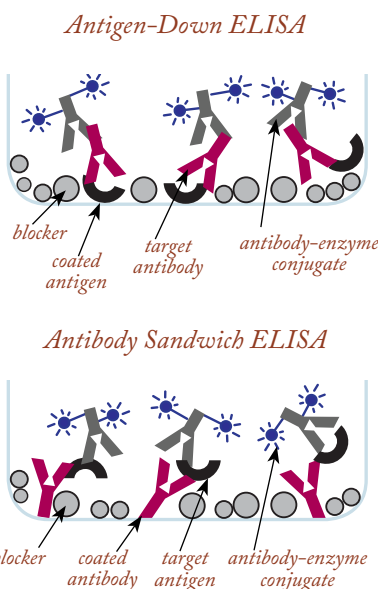
Size	Catalog#
100 mL	632
500 mL	633
1 L	640
10 L	659



### BLOCKING ELISAs

1. Coat antibody or antigen onto the ELISA plate (use coating buffer cat. #645 or #6248).
2. Incubate 8-24 hours at room temperature.
3. Aspirate the coating solution.
4. Wash plate twice with ELISA Wash Buffer (cat. #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.
8. Run the assay immediately, or dry the plate for long-term storage and seal in a foil bag (cat. #6288) with a desiccant pack (cat. #6289).

For more detailed coating and blocking protocols, please visit [www.immunology.com](http://www.immunology.com).



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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 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™ 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. 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.

### 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

### WARNING



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### NEPTUNE™ BLOCK

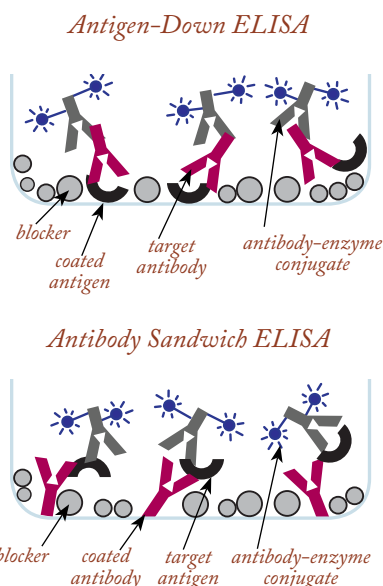
Size	Catalog#
100 mL	62
500 mL	63
1 L	64
10 L	660



### BLOCKING ELISAs

1. Coat antibody or antigen onto the ELISA plate (use coating buffer cat. #645 or #6248).
2. Incubate 8-24 hours at room temperature.
3. Aspirate the coating solution.
4. Wash plate twice with ELISA Wash Buffer (cat. #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.
8. Run the assay immediately, or dry the plate for long-term storage and seal in a foil bag (cat. #6288) with a desiccant pack (cat. #6289).

For more detailed coating and blocking protocols, please visit [www.immunochemistry.com](http://www.immunochemistry.com).



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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 (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.

### SPECIFICATIONS

- Clear liquid
- 1X ready to use
- pH 7.2-7.6

### STORAGE

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

### WARNING



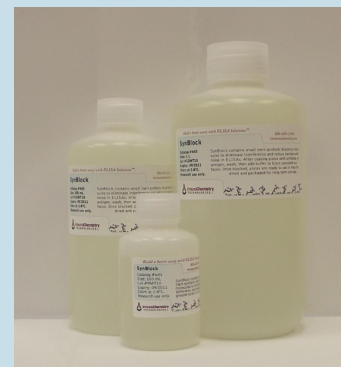
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## SYNBLOCK™

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



## BLOCKING ELISAs

1. Coat antibody or antigen onto the ELISA plate (use coating buffer cat. #645 or #6248). Do not use Immulon II plates with SynBlock™.
2. Incubate 8-24 hours at room temperature.
3. Aspirate the coating solution.
4. Wash plate twice with ELISA Wash Buffer (cat. #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.
8. Run the assay immediately, or dry the plate for long-term storage and seal in a foil bag (cat. #6288) with a desiccant pack (cat. #6289).

For more detailed coating and blocking protocols, please visit [www.immunochemistry.com](http://www.immunochemistry.com).

