General Assay Diluent

Equalizes the sample and standard matrices for a more accurate result.

General Assay Diluent is formulated for testing serum, plasma, urine, and cell culture samples in all sandwich ELISA formats. Use of an assay diluent helps minimize matrix complexity differences between the sample (e.g., serum, etc.) and the diluent used to generate the standard curve of the ELISA. Large differences between the sample and the standard diluent matrices will result in under-recovery of the target analyte present in sample wells. Complex and concentrated protein environments (the matrix) present in serum or plasma samples will greatly reduce the antigen-binding efficiency of the plate-adsorbed antibodies, resulting in a gross underestimation of the amount of target analyte present in the test samples. General Assay Diluent helps equalize the antibody-binding efficiencies between the standard curve and the sample wells.

To use, simply add 50-100 µL to every well of the ELISA plate, including all wells designated for standards, controls, and samples. Then add the standards, controls, and samples to the plate. Mammalian protein additives included in the formulation serve to reduce non-specific interactions between the sample matrix proteins and the plate surface, thereby minimizing background noise. General Assay Diluent also inhibits complement and thrombin activity present in serum and plasma samples. Incorporation of an antimicrobial agent allows for room temperature bench-top use and extensive storage stability at 2-8°C. This assay diluent formulation ensures a more accurate and consistent ELISA performance, regardless of sample type.

**GENERAL ASSAY DILUENT**

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**INSTRUCTIONS:**

1. Dilute the standard curve, controls, and the samples as necessary. ICT offers several formulations of sample diluents in which to prepare the samples.
2. Pipette 50-100 µL General Assay Diluent per well into every well of the plate.
3. Pipette 50-200 µL of each standard, control, and sample into the plate.
4. Run the assay according to the specific ELISA protocol.
5. Analyze the data. Because all of the wells, including the standards and controls, received the same volume of assay diluent, there is no need to account for this dilution when calculating the results.

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

**SPECIFICATIONS:**

- Clear to 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:**

- Warning! May cause an allergic skin reaction.
- SDS available at immunochemistry.com
- Not for human or drug use
- For research use only

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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.
IgM-Reducing Assay Diluent

Minimizes sample matrix differentials and IgM-associated false positive signal.

IgM-Reducing Assay Diluent is formulated to ensure a more accurate and consistent ELISA performance when testing serum and plasma samples in all sandwich ELISA formats. This novel assay diluent utilizes special reducing agents to minimize IgM-associated false positive signal. Rogue IgM in samples can mediate non-specific bridging of the HRP conjugate to coated and blocked ELISA plate surfaces, creating confusing false positive signal that can easily invalidate any ELISA-derived sample data.

IgM-Reducing Assay Diluent provides a mechanism for equalization of matrix complexity differences between the standard curve diluent and test samples, which would otherwise result in under-recovery of the target analyte present in sample wells. Complex and concentrated protein environments (the matrix) present in serum or plasma samples, unlike the simple matrix of the standards, will greatly reduce the antigen-binding efficiency of the plate-adsorbed antibodies, resulting in a gross underestimation of the amount of target analyte present in the test samples. This serious issue common to serum and plasma ELISA format assays may be addressed with the use of an appropriate assay diluent. IgM-Reducing Assay Diluent also contains additives to inhibit complement and thrombin activity present in serum and plasma samples.

To use, simply add 50-100 µL to every well of the ELISA plate, including all wells designated for standards, controls, and samples. Then add the standards, controls, and samples to the plate. An antimicrobial agent is included in the product formulation to allow for room temperature bench-top use and extensive storage stability at 2-8°C.

**IGM-REDUCING ASSAY DILUENT**

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**INSTRUCTIONS:**

1. Dilute the standard curve, controls, and the samples as necessary. ICT offers several formulations of sample diluents in which to prepare the samples.
2. Pipette 50-100 µL IgM-Reducing Assay Diluent per well into every well of the plate.
3. Pipette 50-200 µL of each standard, control, and sample into the plate.
4. Run the rest of the assay according to the specific ELISA protocol.
5. Analyze the data. Because all the wells, including the standards and controls, received the same volume of assay diluent, there is no need to account for this dilution when calculating the results.

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

**SPECIFICATIONS:**

- Clear to cloudy, slightly white liquid
- 1X ready to use
- pH 6.4-6.6

**STORAGE:**

- Shelf life is 18 months at 2-8°C
- 1 week at room temperature

**SAFETY & USAGE:**

- Danger!
- Contains ≥ 3 - < 5% sodium metabisulfite
- Causes serious eye damage
- Product also includes ≤ 0.1% sodium azide
- SDS available at immunochemistry.com
- Not for human or drug use
- For research use only

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Neptune™ Assay Diluent

Provides a complex matrix for equalization of sample and standard matrices.

Neptune™ Assay Diluent is a non-mammalian protein-based reagent formulated to equalize complex matrix differentials that are often encountered when evaluating serum and plasma samples in antibody-sandwich ELISA formats. Large differences between the sample and the standard diluent matrices will result in under-recovery of the target analyte present in sample wells. Complex and concentrated protein environments (the matrix) present in serum or plasma samples will greatly reduce the antigen-binding efficiency of the plate-adsorbed antibodies, resulting in a gross underestimation of the amount of target analyte present in the test samples. Neptune Assay Diluent minimizes this serious issue in ELISA-format assays testing serum or plasma samples.

To use, simply add 50-100 µL to every well of the ELISA plate, including all wells designated for standards, controls, and samples. Then add the standards, controls, and samples to the plate. The diverse protein composition of Neptune Assay Diluent will minimize non-specific binding issues, decreasing background signal and increasing assay sensitivity. Neptune Assay Diluent also inhibits complement and thrombin activity present in serum and plasma samples. Incorporation of an antimicrobial agent allows for room temperature bench-top use and extensive storage stability at 2-8°C. This novel assay diluent was designed to ensure more accurate and consistent ELISA performance, regardless of sample type.

**NEPTUNE ASSAY DILUENT**

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**INSTRUCTIONS:**

1. Dilute the standard curve, controls, and the samples as necessary. ICT offers several formulations of sample diluents in which to prepare the samples.
2. Pipette 50-100 µL Neptune Assay Diluent per well into every well of the plate.
3. Pipette 50-200 µL of each standard, control, and sample into the plate.
4. Run the rest of the assay according to the specific ELISA protocol.
5. Analyze the data. Because all the wells, including the standards and controls, received the same volume of assay diluent, there is no need to account for this dilution when calculating the results.

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

**SPECIFICATIONS:**

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

**STORAGE:**

- 24 months at 2-8°C
- May be stored for 1 week at room temperature

**SAFETY & USAGE:**

- Contains ≤ 0.1% sodium azide
- SDS available at 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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**Antigen-Down Assay Diluent**

Minimizes clotting potential and reduces non-specific binding.

Antigen-Down Assay Diluent is formulated for testing serum and plasma samples in situations where an undesirable clotting event could occur while performing an antigen-down ELISA. Compared to ICT’s other assay diluents, Antigen-Down Assay Diluent contains a higher molar concentration of calcium chelating agents and proprietary additives to eliminate the risk of clotting events in plasma samples and to minimize interference from complement and thrombin activity.

Antigen-Down Assay Diluent also provides a consistent protein matrix environment that will stabilize the antigen-specific target IgG analyte during high dilution ELISA titration protocols. Assessment of high titer, humoral IgG responses often requires dilutions >100,000-fold. This extensive dilution is often necessary to obtain a chromogen absorbance value that is within the sensitivity detection limits of the ELISA plate reader.

This novel assay diluent formulation includes mammalian protein and detergent additives to reduce the non-specific adsorption of generic serum IgG molecules onto the coated and blocked ELISA well surface. This feature can be especially critical when assessing sera derived from human, porcine, or bovine sources, which show a higher tendency to non-specifically adsorb. By minimizing such non-specific binding events, Antigen-Down Assay Diluent inhibits undesirable background noise and increases the sensitivity of the assay.

To use, simply add 50-100 µL to every well of the ELISA plate, including all wells designated for standards, controls, and samples. Then add the standards, controls, and samples to the plate. Incorporation of an antimicrobial agent into the formulation allows for room temperature bench-top use and extensive storage stability at 2-8°C.

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**INSTRUCTIONS:**

1. Dilute the standard curve, controls, and the samples as necessary. ICT offers several formulations of sample diluents in which to prepare the samples.
2. Pipette 50-100 µL Antigen-Down Assay Diluent per well into every well of the plate.
3. Pipette 50-200 µL of each standard, control, and sample into the plate.
4. Run the assay according to the specific ELISA protocol.
5. Analyze the data. Because all of the wells, including the standards and controls, received the same volume of assay diluent, there is no need to account for this dilution when calculating the results.

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

**SPECIFICATIONS:**

- Clear to 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:**

- Warning! May cause an allergic skin reaction.
- SDS available at immunochemistry.com
- Not for human or drug use
- For research use only

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