

## 2X General Assay Diluent

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

2X General Assay Diluent is provided as a 2X concentrate. In order to accommodate increased component quantities present in 2X General Assay Diluent, the pH has been adjusted to 8.5-8.6, compared to 7.2-7.6 in the 1X formulation. This is not expected to have adverse effects on performance, however, users of the 1X formulation should evaluate the impact of switching to the 2X concentrated version of the product experimentally.

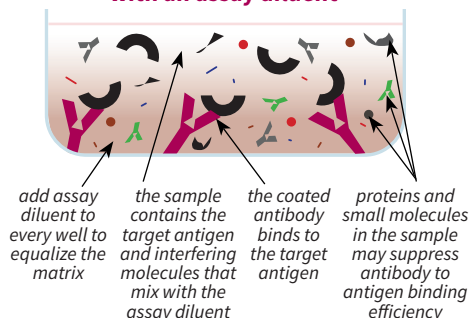
2X General Assay Diluent has been formulated for testing serum, plasma, urine, and cell culture samples in all sandwich ELISA formats. When diluted to its 1X working concentration, it can be used to help minimize matrix complexity differences between the sample (e.g., serum, etc.) and the diluent used 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. 2X General Assay Diluent helps equalize the antibody-binding efficiencies between the standard curve and the sample wells.

To use, dilute 1:2, and then add 50-100  $\mu\text{L}$  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. 2X 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.

### 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.

#### Equalize the matrix with an assay diluent



### 2X GENERAL ASSAY DILUENT

<b>Size</b>	<b>Catalog #</b>
1 L	#6710

#### 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. Prepare 1X working strength assay diluent by diluting 1:2 in  $\text{dH}_2\text{O}$ . Add 1 part 2X General Assay Diluent to 1 part  $\text{dH}_2\text{O}$ . Mix well.
3. Pipette 50-100  $\mu\text{L}$  General Assay Diluent per well into every well of the plate.
4. Pipette 50-200  $\mu\text{L}$  of each standard, control, and sample into the plate.
5. Run the assay according to the specific ELISA protocol.
6. 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](http://www.immunochemistry.com).

#### SPECIFICATIONS:

- Clear to light yellow liquid
- 2X concentrate
- pH 8.5-8.6

#### STORAGE:

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

#### SAFETY & USAGE:

- Warning! Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful to aquatic life with long lasting effects.
- 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.

