V1.1 Revised 07/06/2020

## **Plasma Sample Diluent**

# A stable protein matrix for dilution of plasma and other aqueous-based biological samples.

Plasma Sample Diluent is formulated to provide a stable protein-friendly environment for dilution of neat plasma or serum samples for analysis in antibody-sandwich or antigen-down format ELISAs. It was specifically developed to provide a reliable solution to the occurrence of unwanted clotting events in plasma and serum samples within the microtiter plate wells. When as-

Dilute samples within the detection limits of the ELISA



the coated antibody binds to the target antigen

the target antigen and interfering molecules; it is diluted to improve specificity

proteins and small molecules in the sample may supress antibody to antigen binding efficiency

say sensitivity is a large concern, serum or plasma samples must be added to the ELISA plate neat or diluted only slightly, making clotting more likely. This issue can be essentially eliminated by diluting the potentially problematic samples 1:2 in Plasma Sample Diluent.

Sample diluents are used to dilute samples into the functional range of the assay and to create the standard curve. Due to the finite binding capacity of the plate-coated proteins, highly concentrated samples must be diluted in order to obtain absorbance readings within the sensitivity detection limits of the instrument. Properly formulated sample diluents will also reduce background noise associated with non-specific bridging of signal-generating conjugates to the microtiter plate surface.

Plasma Sample Diluent provides a mammalian protein-buffered, neutral pH environment that is highly compatible with antibody-antigen interactions. Inclusion of a protein component helps minimize the degree of non-specific IgG adsorption onto coated and blocked ELISA plate wells during antigen-down screening of serum or plasma samples. Antimicrobial agents allow for room temperature bench-top use and extensive storage stability at 2-8°C.

#### **PLASMA SAMPLE DILUENT**

Size	Catalog #
100 mL	LS-M29-100
500 mL	LS-M29-500
1 L	LS-M29-1

#### **INSTRUCTIONS:**

- 1. Generally, serum samples should be diluted at least 1:50 to minimize background noise caused by non-specific antibody binding.
- 2. To dilute the sample 1:100, add 1 part sample to 99 parts Plasma Sample Diluent. For example, add 10 µL sample to 990 µL Plasma Sample Diluent for a total of 1,000 µL.
- 3. Highly concentrated samples may need to be diluted 1:1,000 or more.
- 4. Once diluted, run the assay according to the specific ELISA protocol.
- 5. Analyze the data. If the sample was diluted, the dilution factor must be considered when calculating the value.

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

#### **SPECIFICATIONS:**

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

#### **STORAGE:**

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

### **SAFETY & USAGE:**

- Warning! May cause an allergic skin reaction. Harmful to aquatic life with long lasting effects.
- SDS available upon request
- 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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