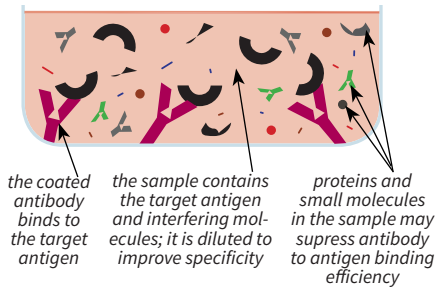
V1.1 Revised 07/06/2020

Sample Diluent (Non-Mammalian)

A complex diluent to control background signal in biological samples.

Sample Diluent (Non-Mammalian) is formulated to provide a complex yet protein-friendly environment for the dilution of biological samples (e.g. serum, cell culture media) into the useful range of antibody-sandwich or antigen-down ELISA format assays. Due to the finite binding capacity of plate-coated proteins (e.g., antibodies, antigens), highly concentrated samples must be diluted in order to obtain absorbance readings within the sensitivity detection limits of the instrument and to create a functional standard curve.

Dilute samples within the detection limits of the ELISA



Utilization of Sample Diluent (Non-Mammalian) minimizes backgrounds and increases assay specificity. It has proven to be highly effective for routine dilution of mouse, porcine, bovine, or rabbit serum samples in antigen-down ELISAs. When testing serum and plasma samples, non-specific adsorption of sample IgG to the ELISA plate surface is a common cause of high background noise. In particular, the glycosylation pattern of porcine serum IgG tends to make porcine samples more 'sticky' than IgGs from other species, such as rabbit or mouse. Sample Diluent (Non-Mammalian) is formulated to reduce this non-specific interaction so that porcine serum samples can be tested without needing a dilution factor beyond 1:100.

Sample Diluent (Non-Mammalian) provides a non-mammalian protein-buffered, neutral pH environment that is highly compatible with antibody-antigen interactions. Antimicrobial agents allow for room temperature bench top use and extensive storage stability at 2-8°C.

Sample Diluent (Non-Mammalian)

Size	Catalog #
100 mL	LS-M31-100
500 mL	LS-M31-500
1 L	LS-M31-1

INSTRUCTIONS:

1. Prepare standards in Sample Diluent (Non-Mammalian).
2. Serum samples should generally be diluted at least 1:50 to minimize backgrounds caused by non-specific antibody binding.
3. To dilute the sample 1:100, add 1 part sample to 99 parts Sample Diluent (Non-Mammalian). For example, add 10 µL sample to 990 µL Sample Diluent (Non-Mammalian) for a total of 1,000 µL.
4. Highly concentrated samples may need to be diluted 1:1,000 or more.
5. Once diluted, run the assay according to the specific ELISA protocol.
6. Analyze the data. If samples were diluted 1:100, the dilution factor must be considered when calculating the value. For example, if the sample generated an OD value that correlates to 500 pg/mL based on the standard curve, multiply by the dilution factor of 100 to yield a true concentration of 50,000 pg/mL = 50 ng/mL in the sample.

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:

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

SAFETY & USAGE:

- Contains ≤ 0.1% sodium azide
- SDS available upon request
- Not for human or drug use
- For research use only

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