General Serum Diluent

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

General Serum Diluent is formulated to provide a stable, protein-friendly environment for dilution of serum, cell culture, ascites, urine, and other aqueous-based biological samples for evaluation within an ELISA format. It can serve as an excellent generic matrix in which to dilute antigen standards when preparing standard curves within antibody-sandwich formats. It also provides an excellent serum dilution medium

Dilute samples within the detection limits of the ELISA



the coated antibody binds to the target antigen

the sample contains 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

for antigen-down ELISAs in the assessment of a humoral immune response to a particular disease state or immunization regimen.

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 well-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. Properly formulated sample diluents will also reduce background noise associated with non-specific bridging of signal-generating conjugates to the plate well surface.

General Serum Diluent provides a BSA 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.

Build a better assay with ELISA Solutions from ImmunoChemistry Technologies.

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.

GENERAL SERUM DILUENT

Size	Catalog#
100 mL	#647
500 mL	#648
1 L	#649
10 L	#675

INSTRUCTIONS:

- 1. Prepare standards and samples in General Serum Diluent.
- 2. Serum samples should generally be diluted at least 1:50 in order to minimize backgrounds caused by non-specific antibody binding.
- 3. To dilute the sample 1:100, add 1 part sample to 99 parts General Serum Diluent. For example, add 10 μ L sample to 990 μ L General Serum Diluent for a total of 1,000 μ L.
- 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 the 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.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:

- Contains ≤ 0.1% sodium azide
- SDS available at immunochemistry.com
- Not for human or drug use
- For research use only



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