

Control Standard Endotoxin (CSE)

Catalog number: CSE10A, CSE10V

Synonym: Lipopolysaccharide (LPS)

Vial Contents: Freeze dried endotoxin purified from *E.coli* strain O111:B4 in a stabilized matrix.

Intended use

Control Standard Endotoxin (CSE) is intended for use to construct standard curves, validate product and prepare inhibition controls in the Amebocyte Lysate (AL, TAL or LAL) endotoxin test. The product is for *In Vitro* laboratory purpose only, not for use in human.

The test procedures described herein are conformed to Chapter <85> Bacterial Endotoxins Test, United States Pharmacopeia.

Potency

The potency of CSE is referenced against USP Reference Standard Endotoxin (RSE). The potency is expressed as EU/vial, which is labeled on the Certificate of Analysis.

Storage

Store lyophilized CSE at 2-8°C . Reconstituted endotoxin solution of potency less than 20 EU/ml is stable for up to one day at 2-8°C, for endotoxin solution potency is equal or higher than 20 EU/ml, it is stable for at least one week at 2-8°C. For endotoxin solution potency is equal or higher than 50EU/ml, it is stable for 14 days at 2-8° C. Vortex for at least 5 minutes before each use. Diluted endotoxin should not be stored except under validated conditions.

Do not freeze endotoxin solutions.

Reconstitution and Dilution

Caution: Reconstitute CSE immediately prior to use.

1. Gently tap the vial allowing CSE powder to fall to the bottom of the vial, open the vial.
2. Reconstitute CSE with Water for BET. The reconstitution volume is indicated in the Certificate of Analysis. Mix vigorously for at least 5 minutes on a vortex, obtaining endotoxin stock solution.

Dilute endotoxin stock solution into series endotoxin standard solutions as the following example:

3. To prepare endotoxin standards at concentrations of 0.008EU/ml, 0.015EU/ml, 0.03EU/ml, 0.06EU/ml, 0.125 EU/ml, 0.25 EU/ml, and 0.5 EU/ml,
- Mix 0.2 ml 50 EU/ml of endotoxin with 0.8 ml Water for BET, vortex for 1 minute, obtaining 10 EU/ml endotoxin solution,
- Mix 0.1 ml 10 EU/ml of endotoxin with 0.9 ml Water for BET, vortex for 1 minute, obtaining 1 EU/ml endotoxin solution,
- Mix 0.5 ml 1 EU/ml of endotoxin with 0.5ml Water for BET, vortex for 1 minute, obtaining 0.5 EU/ml endotoxin,
- Mix 0.5 ml 0.5EU/ml of endotoxin with 0.5ml Water for BET, vortex for 1 minute, obtaining 0.25 EU/ml endotoxin,
- Mix 0.5 ml 0.25EU/ml of endotoxin with 0.5ml Water for BET, vortex for 1 minute, obtaining 0.125 EU/ml endotoxin,
- Mix 0.5 ml 0.125 EU/ml of endotoxin with 0.5ml Water for BET, vortex for 1 minute, obtaining 0.06 EU/ml endotoxin,
- Mix 0.5 ml 0.06 EU/ml of endotoxin with 0.5 ml Water for BET, vortex for 1 minute, obtaining 0.03 EU/ml endotoxin.
- Mix 0.5 ml 0.003 EU/ml of endotoxin with 0.5 ml Water for BET, vortex for 1 minute, obtaining 0.015 EU/ml endotoxin.
- Mix 0.5 ml 0.015EU/ml of endotoxin with 0.5 ml Water for BET, vortex for 1 minute, obtaining 0.008EU/ml endotoxin.

4. Vortex the endotoxin solution for at least 1 minute immediately prior to each use.

Diluted endotoxin solutions are unstable. Prepare a fresh endotoxin dilution series for every new experiment.

Warning:

Product is pyrogenic. Good laboratory technique should be employed in the handling of lipopolysaccharides and Lipid A. Avoid mouth pipetting. Avoid contact with open wounds. Avoid accidental injection.