

Buffer Protocols:

bicine pH 9.0 -

A bicine stock solution was made pH 9.0 with 50% (w/v) NaOH, and the volume adjusted to 1M bicine. A dilution of this stock solution is used in the final formulations.

sodium cacodylate pH 6.5 -

A sodium cacodylate stock solution was made pH 6.5 with concentrated (37%) HCl, and the volume adjusted to 1M sodium cacodylate. A dilution of this stock solution is used in the final formulations.

citrate pH 5.5 -

0.5 M citric acid and 0.5 M tri-sodium citrate solutions were mixed together to make a pH 5.5 citrate stock solution. A dilution of this stock solution is used in the final formulations.

citric acid pH 4.0 -

A citric acid stock solution was made pH 4.0 with 50% (w/v) NaOH, and the volume adjusted to 1 M citric acid. A dilution of this stock solution is used in the final formulations.

citric acid pH 5.0 -

A citric acid stock solution was made pH 5.0 with 50% (w/v) NaOH, and the volume adjusted to 1 M citric acid. A dilution of this stock solution is used in the final formulations.

HEPES pH 7.0 -

A HEPES stock solution was made pH 7.0 with 50% (w/v) NaOH, and the volume adjusted to 1 M HEPES. A dilution of this stock solution is used in the final formulations.

HEPES pH 7.5 -

A HEPES stock solution was made pH 7.5 with 50% (w/v) NaOH, and the volume adjusted to 1 M HEPES. A dilution of this stock solution is used in the final formulations.

MES pH 6.5 -

A MES stock solution was made pH 6.5 with 50% NaOH, and the volume adjusted to 1 M MES. A dilution of this stock solution is used in the final formulations.

sodium acetate pH 4.6 -

A sodium acetate stock solution was made pH 4.6 with concentrated (37%) HCl, and the volume adjusted to 1 M sodium acetate. A dilution of this stock solution is used in the final formulations.

Tris pH 8.0 -

A Tris base stock solution was made pH 8.0 with concentrated (37%) HCl, and the volume adjusted to 1 M Tris. A dilution of this stock solution is used in the final formulations.

Tris pH 8.5 -

A Tris base stock solution was made pH 8.5 with concentrated (37%) HCl, and the volume adjusted to 1 M Tris. A dilution of this stock solution is used in the final formulations.

Abbreviations:

bicine - N,N-Bis(2-hydroxyethyl)glycine

HEPES - N-(2-hydroxyethyl)piperazine-N'-(2-ethanesulfonic acid)

MES - 2-(N-morpholino)ethanesulfonic acid

Tris - tris(hydroxymethyl)aminomethane