Compatibility Chart For Bradford Kit

The concentration listed below is the maximum amount of material which can be present in the protein sample without causing interference in the standard protocol when 20 ul protein sample is used for Bradford assay.

Incompatible Substances /Amount Compatible

Buffer Systems
ACES, pH 7.8 100 mM
N-Acetylglucosamine in PBS, pH 7.2, 100 mM
Bicine, pH 8.4 100 mM
Bis-Tris, pH 6.5 100 mM
Calcium chloride in TBS, pH 7.2 10 mM
CelLytic B Reagent undiluted, no interference
CHES, pH 9.0 100 mM
Cobalt chloride in TBS, pH 7.2 10 mM
EPPS, pH 8.0 100 mM
Ferric chloride in TBS, pH 7.2 10 mM
Glycine 100 mM
HEPES, pH 7.5 100 mM
Imidazole, pH 7.0 200 mM
MES (0.1 M), NaCl (0.9%), pH 4.7 undiluted
MES, pH 6.1 100 mM
MOPS, pH 7.2 100 mM
Nickel chloride in TBS, pH 7.2 10 mM
PBS; Phosphate (0.1 M), NaCl (0.15 M), pH 7.2, undiluted
PIPES, pH 6.8 100 mM
Sodium acetate, pH 4.8 180 mM
Sodium bicarbonate 0.1 M
Sodium citrate, pH 4.8 or pH 6.4 200 mM
Sodium Citrate (0.6 M), MOPS (0.1 M), pH 7.5, undiluted
Sodium phosphate 0.1 M
TBS; Tris (25 mM), NaCl (0.15 M), pH 7.6, undiluted
Tricine, pH 8.0 100 mM
Triethanolamine, pH 7.8 100 mM
Tris 2.0 M
Tris (25 mM), Glycine (192 mM), pH 8.0, undiluted
Tris (25 mM), Glycine (192 mM), SDS (0.1%), pH 8.3, 1:2 dilution
Zinc chloride in TBS, pH 7.2 10 mM

Buffer Additives
Ammonium sulfate 1.0 M
Aprotinin 10 mg/L
Asparagine 10 mM
Cesium bicarbonate 0.1 M
Glucose 1.0 M
Glycerol 10%
Guanidine•HCl 3.5 M
Hydrochloric Acid 0.1 M
Imidazole, pH 7.0 200 mM
Leupeptin 10 mg/L
Phenol Red 0.5 mg/ml
PMSF 1 mM
Sodium azide 0.5%
Sodium chloride 5.0 M
Sodium Hydroxide 0.1 M

Sodium orthovanadate in PBS, 1 mM
Thimerosal 0.01%
Sucrose 10%
TLCK 0.1 mg/L
TPCK 0.1 mg/L
Urea 3.0 M 3.0 M

Detergents
Brij®-35 0.125%
Brij®-52 0.031%
CHAPS 5%
CHAPSO 5%
Deoxycholic acid 0.050%
Nonidet P-40 (Igepal CA-630) 0.5%
N-Tetradecyl-N 0.125%
Octyl ®-glucoside 0.5%
Octyl ®-thioglucopyranoside 3%
SDS 0.125%
Span® 20 0.5%
Triton® X-100 0.125%
Triton® X-114 0.125%
Triton® X-305 0.5%
Triton® X-405 0.5%
Tween® 20 0.062%
Tween® 60 0.1%
Tween® 80 0.062%

Chelating agents
EDTA 100 mM 100 mM
EGTA 2 mM 2 mM
Sodium citrate, pH 4.8 or pH 6.4 200 mM

Reducing & Thiol Containing Agents
2-Mercaptoethanol 1.0 M
Ascorbic acid 50 mM
Cysteine 10 mM
Dithioerythritol (DTE) 1 mM
Dithiothreitol (DTT) 5 mM
Potassium thiocyanate 3.0 M

Solvents
Acetone 10%
Acetonitrile 10%
DMF 10%
DMSO 10%
Ethanol 10%
Methanol 10%

Note: This is not a complete compatibility chart. There are many substances that can affect different proteins in different ways. One may assay the protein of interest in deionized water alone, then in buffer with possible interfering substances. Comparison of the readings will indicate if an interference exists.

Note: Reagents that change the pH of the assay or contains high levels of detergents will interfere with the Bradford assay.