Protein biology

Protein quantitation assay compatibility table

Introduction

No single protein assay is compatible with all sample components that might be encountered in a typical laboratory. To avoid the frustration of discovering incompatibility by trial and error, review the compatibility tables on the following pages (Tables 1 and 2) that summarize compatible substances for several popular protein assays. The tables serve as a guide for assessing which protein assay might be most effective with a given sample type. Use this information as a guide only. Since it is possible for sample and assay components to have an additive effect, we recommend verifying the compatibility of your specific sample buffer components.

About the compatibility tables

The tables list the maximum compatible concentrations for substances tested based on a concentration of BSA standard of 1,000 µg/mL for most assays and 10 µg/mL for Thermo Scientific™ Pierce™ microplate BCA protein assay kits. A substance was considered compatible at the indicated concentration if the error in protein concentration estimation caused by the presence of the substance in a sample was less than or equal to 10%. The protein assays were conducted using the test tube procedure unless formulated for smaller volumes (e.g., Thermo Scientific™ Pierce™ microplate BCA protein assays, Pierce™ Dilution-Free Rapid Gold BCA Protein Assays). The Invitrogen™ Qubit™ Protein BR Assay Kit was tested using PCR tubes.

Notes and symbols

The concentration listed refers to the actual concentration in the protein sample. An Ø denotes compounds that were not compatible at the lowest concentrations tested. NA indicates the substance has not been tested for that assay. Compounds are listed alphabetically under common names or abbreviations with the exception of sodium compounds, which are alphabetized under “Na”. Dilutions are expressed as undiluted or as a ratio, where 1:2 indicates 2-fold dilution.

Table 1. Substances compatible with Thermo Scientific™ Pierce™ BCA assays and the Qubit Protein BR Assay.

Test compound	Pierce Dilution-Free Rapid Gold BCA	Pierce Rapid Gold BCA	Pierce BCA	Pierce Microplate BCA-RAC*	Pierce Micro BCA	Qubit Protein BR Assay
2D sample buffer†	NA	NA	NA	NA	NA	NA
2-mercaptoethanol	Ø	Ø	0.01%	25 mM (35)	1 mM	1 mM
ACES, pH 7.8	25 mM	25 mM	25 mM	Ø	10 mM	NA
Acetone	10%	10%	10%	Ø	1%	NA
Acetonitrile	10%	10%	10%	30%	1%	20%
Ammonium sulfate	NA	Ø	Ø	Ø	Ø	200 mM
Aprotinin	10 mg/L	10 mg/L	10 mg/L	Ø	1 mg/L	NA
Ascorbic acid	NA	NA	Ø	NA	Ø	NA
Asparagine	1 mM	NA	1 mM	Ø	NA	NA
Bicine	10 mM	20 mM	20 mM	1 mM	2 mM	100 mM
Bis-Tris, pH 6.5	10 mM	NA	33 mM	16.5 mM	0.2 mM	NA
Borate (50 mM), pH 8.5	Undiluted	Undiluted	Undiluted	Ø	1:4	Undiluted
B-PER reagent	Undiluted	Undiluted	Undiluted	1:3	NA	Undiluted
B-PER reagent II	Undiluted	NA	NA	1:4	NA	Undiluted
B-PER reagent PBS	Undiluted	NA	NA	1:4	NA	Undiluted
Brij-35	5%	5%	5%	0.63%	5%	NA
Brij-56	NA	NA	1%	NA	1%	NA
Brij-58	1%	1%	1%	0.50%	1%	NA
Bromophenol blue (in 50 mM NaOH)	NA	Ø	Ø	Ø	Ø	NA
Calcium chloride (in TBS, pH 7.2)	10 mM	10 mM	10 mM	1 mM	10 mM	NA
Cesium bicarbonate	100 mM	NA	100 mM	Ø	100 mM	NA
Cetylpyridinium chloride	NA	NA	NA	NA	NA	NA
CHAPS	5%	5%	5%	10% (10)	1%	5%
CHAPSO	5%	5%	5%	Ø	5%	NA
CHES	100 mM	100 mM	100 mM	50 mM	100 mM	NA
Cobalt chloride (in TBS, pH 7.2)	0.8 mM	0.8 mM	0.8 mM	0.4 mM	Ø	NA
CTAB	NA	NA	NA	NA	NA	NA
Cysteine	NA	NA	Ø	2.5 mM	Ø	NA
Dithioerythritol (DTE)	5 mM	NA	1 mM	2.5 mM	Ø	NA
Dithiothreitol (DTT)	5 mM	Ø	1 mM	5 mM (5)	Ø	5 mM
DMF	10%	10%	10%	5%	1%	NA
DMSO	10%	10%	10%	0.25%	1%	NA
DTAB	NA	NA	NA	NA	NA	50 mM
EDTA	10 mM	10 mM	10 mM	5 mM (20)	0.5 mM	NA
EGTA	5 mM	NA	Ø	5 mM (10)	Ø	NA
EPPS, pH 8.0	100 mM	100 mM	100 mM	Ø	100 mM	NA
Ethanol	10%	10%	10%	Ø	1%	NA
Ferric chloride (in TBS, pH 7.2)	5 mM	10 mM	10 mM	5 mM	0.5 mM	NA
Glucose	10 mM	10 mM	10 mM	Ø	1 mM	1 M
Glutathione (reduced)	NA	NA	NA	10 mM	NA	NA
Glycerol (fresh)	2%	10%	10%	5%	1%	10%
Glycine-HCl, pH 2.8	100 mM	100 mM	100 mM	50 mM	NA	Ø
Guanidine-HCl	4 M	4 M	4 M	1.5 M (2)	4 M	4 M
HEPES, pH 7.5	100 mM	100 mM	100 mM	200 mM (200)	100 mM	NA
Hydrides (Na_2BH_4 or $NaCNBH_3$)	NA	NA	Ø	NA	Ø	NA
Hydrochloric acid (HCl)	100 mM	100 mM	100 mM	Ø	10 mM	NA
Imidazole, pH 7.0	5 mM	12.5 mM	50 mM	30 mM (50)	12.5 mM	200 mM
I-PER reagent	Diluted 1:2	Undiluted	Undiluted	NA	NA	Undiluted

* Selected values for the regular Pierce BCA Protein Assay Kit - Reducing Agent Compatible (RAC) are given in parentheses in the column for the Pierce Microplate BCA-RAC kit.
† Compound (buffer) formulation is described more fully in the buffer formulations table (Table 3).

Table 1. Substances compatible with Thermo Scientific™ Pierce™ BCA assays and the Qubit Protein BR Assay. (cont.)

Test compound	Pierce Dilution-Free Rapid Gold BCA	Pierce Rapid Gold BCA	Pierce BCA	Pierce Microplate BCA-RAC*	Pierce Micro BCA	Qubit Protein BR Assay
Laemmli SDS sample buffer†	NA	Ø	Ø	Ø	Ø	NA
Leupeptin	10 mg/L	10 mg/L	10 mg/L	Ø	10 mg/L	NA
Mannitol	NA	NA	NA	NA	NA	NA
Melibiose	NA	NA	Ø	NA	NA	NA
Mem-PER reagent	Undiluted	Undiluted	Undiluted	1:2	Undiluted	Undiluted
Mem-PER Plus reagent	Undiluted	Undiluted	Undiluted	NA	Undiluted	NA
MES-buffered saline, pH 4.7†	Undiluted	Undiluted	Undiluted	Ø	1:4	NA
MES, pH 6.1	100 mM	100 mM	100 mM	100 mM (100)	100 mM	125 mM
Methanol	10%	NA	10%	0.5%	1%	NA
Magnesium chloride	NA	NA	NA	100 mM	NA	NA
Modified Dulbecco's PBS†	Undiluted	NA	Undiluted	Undiluted	Undiluted	Undiluted
MOPS, pH 7.2	100 mM	100 mM	100 mM	200 mM	100 mM	100 mM
M-PER reagent	NA	Undiluted	Undiluted	1:2	NA	Undiluted
N-acetylglucosamine	10 mM	10 mM	10 mM	Ø	Ø	NA
Na (sodium) acetate, pH 4.8	200 mM	200 mM	200 mM	Ø	200 mM	NA
Na azide	0.002	0.2%	0.2%	0.01%	0.20%	NA
Na bicarbonate	100 mM	100 mM	100 mM	Ø	100 mM	NA
Na carbonate-bicarbonate, pH 9.4†	Undiluted	NA	Undiluted	Undiluted	Undiluted	0.2 M
Na chloride	1 M	NA	1 M	150 mM	1 M	5 M
Na citrate, pH 4.8	100 mM	200 mM	200 mM	50 mM	5 mM	NA
Na citrate-carbonate, pH 9.0†	1:16	1:8	1:8	Ø	1:600	NA
Na citrate-MOPS, pH 7.5†	1:16	1:8	1:8	Undiluted	1:600	NA
Na deoxycholate	5%	5%	5%	NA	5%	NA
Na hydroxide (NaOH)	100 mM	100 mM	100 mM	Ø	50 mM	NA
Na phosphate	100 mM	100 mM	100 mM	100 mM	100 mM	NA
NE-PER reagent (CER)	Undiluted	1:2	Undiluted	1:2	NA	Undiluted
NE-PER reagent (NER)	Undiluted	Undiluted	Undiluted	1:4	NA	Undiluted
Nickel chloride (in TBS, pH 7.2)	10 mM	NA	10 mM	Ø	0.2 mM	NA
NP-40	2%	5%	5%	Ø	5%	5%
Octyl beta-glucoside	5%	5%	5%	2.5% (10)	0.1%	NA
Octylthioglucoside	2%	NA	5%	7%	5%	NA
Na-orthovanadate (in PBS, pH 7.2)	1 mM	1 mM	1 mM	0.5 mM	1 mM	NA
Phenol red	Ø	NA	Ø	3.125 µg/mL	Ø	NA
Phosphate-buffered saline (PBS)†	Undiluted	Undiluted	Undiluted	Undiluted	Undiluted	Undiluted
PIPES pH 6.8	100 mM	NA	100 mM	25 mM	100 mM	NA
PMSF in isopropanol	1 mM	1 mM	1 mM	0.125 mM	1 mM	1 mM
Potassium thiocyanate	1 mg/mL	3 M	3 M	Ø	NA	NA
P-PER reagent	NA	NA	Ø	1:2	NA	NA
RIPA buffer†	Undiluted	Undiluted	Undiluted	1:2	1:10	Undiluted
SDS	5%	5%	5%	5% (10)	5%	5%
Span 20	1%	0.5%	1%	NA	1%	NA
Sucrose	40%	40%	40%	40% (40)	4%	20%
TCEP	Ø	NA	NA	10 mM (10)	NA	NA
Thimerosal	Ø	NA	0.01%	0.03%	Ø	NA
Thiourea	NA	NA	NA	NA	NA	NA
TLCK	0.1 mg/L	0.1 mg/L	0.1 mg/L	Ø	0.1 mg/L	NA
TPCK	0.1 mg/L	0.1 mg/L	0.1 mg/L	Ø	0.1 mg/L	NA

* Selected values for the regular Pierce BCA Protein Assay Kit - Reducing Agent Compatible (RAC) are given in parentheses in the column for the Pierce Microplate BCA-RAC kit.

† Compound (buffer) formulation is described more fully in the buffer formulations table (Table 3).

Table 1. Substances compatible with Thermo Scientific™ Pierce™ BCA assays and the Qubit Protein BR Assay. (cont.)

Test compound	Pierce Dilution-Free Rapid Gold BCA	Pierce Rapid Gold BCA	Pierce BCA	Pierce Microplate BCA-RAC*	Pierce Micro BCA	Qubit Protein BR Assay
T-PER reagent	Diluted 1:2	1:2	1:2	NA	NA	Undiluted
Tricine, pH 8.0	25 mM	25 mM	25 mM	0.5 mM	2.5 mM	50 mM
Triethanolamine, pH 7.8	25 mM	25 mM	25 mM	25 mM	0.5 mM	NA
Tris-buffered saline (TBS)†	Undiluted	Undiluted	Undiluted	Undiluted	1:10	Undiluted
Tris-glycine, pH 8.0†	Undiluted	1:2	1:3	Ø	1:10	Ø
Tris-glycine-SDS, pH 8.3†	Undiluted	Undiluted	Undiluted	Ø	Undiluted	Ø
Tris-HCl, pH 8.0	50 mM	Ø	250 mM	35 mM (50)	50 mM	500 mM
Tris-HEPES-SDS†	100 mM	100 mM	NA	NA	NA	Undiluted
Triton X-100	5%	5%	5%	7% (10)	5%	5%
Triton X-114	1%	1%	1%	2% (2)	0.05%	NA
Triton X-305	1%	1%	1%	1%	1%	NA
Triton X-405	1%	1%	1%	Ø	1%	NA
Tween 20	5%	5%	5%	10% (10)	5%	3%
Tween 60	5%	5%	5%	5%	0.5%	NA
Tween 80	5%	5%	5%	2.5%	5%	NA
Urea	3 M	3 M	3 M	3 M (4)	3 M	3 M
Y-PER reagent	Diluted 1:4	Ø	Undiluted	NA	NA	Ø
Y-PER Plus reagent	Undiluted	Ø	Undiluted	NA	NA	NA
Zinc chloride (in TBS, pH 7.2)	5 mM	10 mM	10 mM	Ø	0.5 mM	NA
Zwittergent 3-14	1%	NA	1%	2% (2)	Ø	NA

* Selected values for the regular Pierce BCA Protein Assay Kit - Reducing Agent Compatible (RAC) are given in parentheses in the column for the Pierce Microplate BCA-RAC kit.

† Compound (buffer) formulation is described more fully in the buffer formulations table (Table 3).

Table 2. Substances compatible with Thermo Scientific™ Pierce™ Lowry, Bradford, and 660 nm assays.

Test compound	Pierce Modified Lowry	Pierce Detergent Compatible Bradford	Pierce Bradford Plus	Pierce Bradford	Pierce 660 nm
2D sample buffer†	NA	NA	NA	NA	Undiluted**
2-mercaptoethanol	1 mM	1 M	1 M	1 M	1 M
ACES, pH 7.8	NA	NA	100 mM	100 mM	50 mM
Acetone	10%	10%	10%	10%	50%
Acetonitrile	10%	10%	10%	10%	50%
Ammonium sulfate	Ø	1 M	1 M	1 M	125 mM
Aprotinin	10 mg/L	10 mg/mL	10 mg/L	10 mg/L	2 mM
Ascorbic acid	1 mM	50 mM	50 mM	50 mM	500 mM
Asparagine	5 mM	NA	10 mM	10 mM	40 mM
Bicine	NA	100 mM	100 mM	100 mM	>1 M
Bis-Tris, pH 6.5	NA	100 mM	100 mM	100 mM	50 mM
Borate (50 mM), pH 8.5	NA	Undiluted	Undiluted	Undiluted	Undiluted
B-PER reagent	NA	Undiluted	1:2	1:2	1:2
B-PER reagent II	NA	NA	1:4	NA	1:2
B-PER reagent PBS	NA	Undiluted	NA	NA	1:2
Brij-35	0.031%	1%	0.062%	0.125%	5%
Brij-56	0.062%	NA	0.031%	0.031%	NA
Brij-58	0.062%	1%	0.016%	0.031%	5%
Bromophenol blue (in 50 mM NaOH)	Ø	NA	Ø	Ø	0.031%
Calcium chloride (in TBS, pH 7.2)	NA	10 mM	10 mM	10 mM	40 mM
Cesium bicarbonate	50 mM	NA	100 mM	100 mM	100 mM
Cetylpyridinium chloride	NA	NA	NA	NA	2.5%**
CHAPS	0.062%	5%	5%	5%	5%
CHAPSO	0.031%	5%	5%	5%	4%
CHES	NA	NA	100 mM	100 mM	>500 mM
Cobalt chloride (in TBS, pH 7.2)	NA	NA	10 mM	10 mM	20 mM
CTAB	NA	NA	NA	NA	2.5%**
Cysteine	1 mM	10 mM	10 mM	10 mM	350 mM
Dithioerythritol (DTE)	Ø	NA	1 mM	1 mM	25 mM
Dithiothreitol (DTT)	Ø	5 mM	5 mM	5 mM	500 mM
DMF	10%	10%	10%	10%	50%
DMSO	10%	10%	10%	10%	50%
DTAB	NA	NA	NA	NA	2%**
EDTA	1 mM	100 mM	100 mM	100 mM	20 mM
EGTA	1 mM	2 mM	2 mM	2 mM	20 mM
EPPS, pH 8.0	NA	NA	100 mM	100 mM	200 mM
Ethanol	10%	10%	10%	10%	50%
Ferric chloride (in TBS, pH 7.2)	NA	NA	10 mM	10 mM	5 mM
Glucose	100 mM	NA	1 mM	1 mM	500 mM
Glutathione (reduced)	NA	NA	NA	NA	100 mM
Glycerol (fresh)	10%	10%	10%	10%	50%
Glycine-HCl, pH 2.8	100 mM	100 mM	100 mM	100 mM	100 mM
Guanidine-HCl	NA	1.25 M	3.5 M	3.5 M	2.5 M
HEPES, pH 7.5	1 mM	100 mM	100 mM	100 mM	100 mM
Hydrides (Na_2BH_4 or $NaCNBH_3$)	NA	NA	NA	NA	Ø
Hydrochloric acid (HCl)	100 mM	100 mM	100 mM	100 mM	125 mM
Imidazole, pH 7.0	25 mM	200 mM	200 mM	200 mM	200 mM
I-PER reagent	NA	NA	NA	NA	1:4

** Value when the Pierce 660 nm assay is run using Thermo Scientific™ Ionic Detergent Compatibility Reagent for Pierce 600 nm Protein Assay (Cat. No. 22663).

† Compound (buffer) formulation is described more fully in the buffer formulations table (Table 3).

Table 2. Substances compatible with Thermo Scientific™ Pierce™ Lowry, Bradford, and 660 nm assays. (cont.)

Test compound	Pierce Modified Lowry	Pierce Detergent Compatible Bradford	Pierce Bradford Plus	Pierce Bradford	Pierce 660 nm
Laemmli SDS sample buffer†	Ø	NA	Ø	Ø	NA
Leupeptin	10 mg/L	10 mg/L	10 mg/L	10 mg/L	80 µM
Mannitol	NA	NA	NA	NA	100 mM
Melibiose	25 mM	NA	100 mM	100 mM	500 mM
Mem-PER reagent	NA	NA	Undiluted	NA	Undiluted
Mem-PER Plus reagent	NA	Undiluted	NA	NA	Undiluted
MES-buffered saline, pH 4.7†	NA	Undiluted	Undiluted	Undiluted	Undiluted
MES, pH 6.1	125 mM	100 mM	100 mM	100 mM	125 mM
Methanol	10%	10%	10%	10%	50%
Magnesium chloride	NA	500 mM	NA	NA	>1 M
Modified Dulbecco's PBS†	NA	Undiluted	Undiluted	Undiluted	Undiluted
MOPS, pH 7.2	NA	100 mM	100 mM	100 mM	125 mM
M-PER reagent	NA	Undiluted	Undiluted	NA	1:2
N-acetylglucosamine	NA	NA	100 mM	100 mM	100 mM
Na (sodium) acetate, pH 4.8	200 mM	180 mM	180 mM	180 mM	100 mM
Na azide	0.2%	0.5%	0.5%	0.5%	0.125%
Na bicarbonate	100 mM	100 mM	100 mM	100 mM	100 mM
Na carbonate-bicarbonate, pH 9.4†	NA	Undiluted	Undiluted	Undiluted	1:3
Na chloride	1 M	1 M	5 M	5 M	1.25 M
Na citrate, pH 4.8	NA	200 mM	200 mM	200 mM	12.5 mM
Na citrate-carbonate, pH 9.0†	NA	NA	Undiluted	Undiluted	Ø
Na citrate-MOPS, pH 7.5†	NA	NA	NA	Undiluted	1:16
Na deoxycholate	NA	0.1%	0.4%	0.05%	0.25%
Na hydroxide (NaOH)	100 mM	75 mM	100 mM	100 mM	125 mM
Na phosphate	100 mM	100 mM	100 mM	100 mM	500 mM
NE-PER reagent (CER)	NA	Undiluted	1:4	NA	Undiluted
NE-PER reagent (NER)	NA	NA	Undiluted	NA	Undiluted
Nickel chloride (in TBS, pH 7.2)	NA	NA	10 mM	10 mM	10 mM
NP-40	0.016%	1%	0.5%	0.5%	5%
Octyl beta-glucoside	0.031%	5%	0.5%	0.5%	5%
Octylthioglucoside	NA	5%	3%	3%	10%
Na-orthovanadate (in PBS, pH 7.2)	NA	NA	1 mM	1 mM	50 mM
Phenol red	NA	0.5 mg/mL	0.5 mg/mL	0.5 mg/mL	0.5 mg/mL
Phosphate-buffered saline (PBS)†	NA	Undiluted	Undiluted	Undiluted	Undiluted
PIPES pH 6.8	NA	NA	100 mM	100 mM	100 mM
PMSF in isopropanol	1 mM	1 mM	1 mM	1 mM	1 mM
Potassium thiocyanate	100 mM	NA	3 M	3 M	250 mM
P-PER reagent	Ø	NA	Ø	Ø	1:2
RIPA buffer†	NA	1:4	1:40	1:10	Undiluted
SDS	1%	0.5%	0.016%	0.125%	0.01%, 5%**
Span 20	0.25%	NA	0.5%	0.5%	NA
Sucrose	7.5%	10%	10%	10%	50%
TCEP	NA	100 mM	NA	NA	40 mM
Thimerosal	0.01%	NA	0.01%	0.01%	0.25%
Thiourea	NA	NA	NA	NA	2 M
TLCK	0.01 mg/L	NA	0.1 mg/mL	0.1 mg/L	5 mg/mL
TPCK	0.1 mg/L	NA	0.1 mg/mL	0.1 mg/L	4 mg/mL

** Value when the Pierce 660 nm assay is run using Thermo Scientific™ Ionic Detergent Compatibility Reagent for Pierce 600 nm Protein Assay (Cat. No. 22663).

† Compound (buffer) formulation is described more fully in the buffer formulations table (Table 3).

Table 2. Substances compatible with Thermo Scientific™ Pierce™ Lowry, Bradford, and 660 nm assays. (cont.)

Test compound	Pierce Modified Lowry	Pierce Detergent Compatible Bradford	Pierce Bradford Plus	Pierce Bradford	Pierce 660 nm
T-PER reagent	NA	Undiluted	Undiluted	NA	1:2
Tricine, pH 8.0	NA	NA	100 mM	100 mM	500 mM
Triethanolamine, pH 7.8	NA	NA	100 mM	100 mM	100 mM
Tris-buffered saline (TBS)†	NA	Undiluted	Undiluted	Undiluted	Undiluted
Tris-glycine, pH 8.0†	NA	Undiluted	Undiluted	Undiluted	Undiluted
Tris-glycine-SDS, pH 8.3†	NA	Undiluted	1:4	1:2	Undiluted**
Tris-HCl, pH 8.0	10 mM	2 M	2 M	2 M	250 mM
Tris-HEPES-SDS†	NA	NA	NA	NA	Undiluted**
Triton X-100	0.031%	1%	0.062%	0.125%	1%
Triton X-114	0.031%	1%	0.062%	0.125%	0.50%
Triton X-305	0.031%	NA	0.125%	0.5%	9%
Triton X-405	0.031%	NA	0.025%	0.5%	5%
Tween 20	0.062%	1%	0.031%	0.062%	10%
Tween 60	NA	NA	0.025%	0.1%	5%
Tween 80	0.031%	0.1%	0.016%	0.062%	5%
Urea	3 M	3 M	3 M	3 M	8 M
Y-PER reagent	NA	NA	NA	NA	Ø
Y-PER Plus reagent	NA	Undiluted	Undiluted	NA	1:2
Zinc chloride (in TBS, pH 7.2)	NA	NA	10 mM	10 mM	10 mM
Zwittergent 3-14	NA	NA	0.025%	0.025%	0.05%

** Value when the Pierce 660 nm assay is run using Thermo Scientific™ Ionic Detergent Compatibility Reagent for Pierce 600 nm Protein Assay (Cat. No. 22663).

† Compound (buffer) formulation is described more fully in the buffer formulations table (Table 3).

Table 3. Buffer formulations used in compatibility testing.

Buffer	Formulation	Cat. No.
2D sample buffer	8 M urea, 4% CHAPS or 7 M urea, 2 M thiourea, 4% CHAPS	–
Laemmli SDS sample buffer	65 mM Tris-HCl, 10% glycerol, 2% SDS, 0.025% bromophenol blue	LC2676
MES-buffered saline, pH 4.7	0.1 M MES, 150 mM NaCl (pH 4.7)	28390
Modified Dulbecco's PBS	8 mM sodium phosphate, 2 mM potassium phosphate, 0.14 M NaCl, 10 mM KCl (pH 7.4)	28374
Na carbonate-bicarbonate, pH 9.4	0.2 M sodium carbonate-bicarbonate (pH 9.4)	28382
Na citrate-carbonate, pH 9.0	0.6 M sodium citrate, 0.1 M sodium-carbonate (pH 9.0)	–
Na citrate-MOPS, pH 7.5	0.6 M sodium citrate, 0.1 M MOPS (pH 7.5)	–
Phosphate-buffered saline (PBS)	100 mM sodium phosphate, 150 mM NaCl (pH 7.2)	28372
RIPA buffer	50 mM Tris, 150 mM NaCl, 0.5% sodium deoxycholate, 1% NP-40, 0.1% SDS (pH 8.0)	89900
Tris-buffered saline (TBS)	25 mM Tris, 150 mM NaCl (pH 7.6)	28379
Tris-glycine, pH 8.0	25 mM Tris, 192 mM glycine (pH 8.0)	28380
Tris-glycine-SDS, pH 8.3	25 mM Tris, 192 mM glycine, 0.1% SDS (pH 8.3)	28362
Tris-HEPES-SDS	100 mM Tris, 100 mM HEPES, 3 mM SDS	28398

Ordering information

Product	Quantity	Cat. No.
Pierce Dilution-Free Rapid Gold BCA Protein Assay Kit	250 mL	A55861
	500 mL	A55860
	20 mL	A55862
Pierce Rapid Gold BCA Protein Assay Kit	250 mL	A53226
	500 mL	A53225
Pierce BCA Protein Assay Kit	500 mL	23227
	1 L	23225
Pierce BCA Protein Assay Kit with Dilution-Free BSA Protein Standards, Multichannel Pipette Compatible	500 mL	A55864
	1 L	A55865
Pierce BCA Protein Assay Kit - Reducing Agent Compatible	275 mL	23250
Pierce Microplate BCA Protein Assay Kit - Reducing Agent Compatible	275 mL	23252
Pierce Micro BCA Protein Assay Kit	500 mL	23235
Pierce Modified Lowry Protein Assay Kit	530 mL	23240
Pierce Detergent Compatible Bradford Assay Kit	450 mL	23246
Pierce Bradford Plus Assay Kit with Dilution-Free BSA Protein Standards, Multichannel Pipette Compatible	950 mL	A55866
Pierce Bradford Plus Assay Kit	950 mL	23236
Pierce Bradford Assay Kit	950 mL	23200
Pierce 660 nm Protein Assay Kit	450 mL	22662
Qubit Protein BR Assay Kit	100 assays	A50668
	500 assays	A50669
Pierce Dilution-Free BSA Protein Standards, Multichannel Pipette Compatible, 2 mg/mL	2 × 1 mL 8-channel tube strip	A55863
Pierce Dilution-Free BSA Protein Standards, Multichannel Pipette Compatible, 10 mg/mL		A56979

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