

PROTEIN BUFFERS

0.1 M NaH₂PO₄, pH 6.2 (Activation Buffer)* 250 mL

Reagent	Catalog Number	Final Concentration	Amount/ 250 mL
NaH ₂ PO ₄ (Sodium phosphate monobasic, anhydrous)	Sigma S3139	0.1 M NaH ₂ PO ₄	3 g
5 N NaOH	Fisher SS256-500	-----	~ 40 drops

Filter Sterilize and store at 4°C

* Activation can be performed in 50 mM MES, pH 6.0-6.2 with similar results.

0.05 M MES, pH 5.0 (Coupling Buffer)** 250 mL

Reagent	Catalog Number	Final Concentration	Amount/ 250 mL
MES (2[N-Morpholino] ethanesulfonic acid)	Sigma M2933	0.05 M MES	2.44 g
5 N NaOH	Fisher SS256-500	-----	~ 5 drops

Filter Sterilize and store at 4°C

** Coupling can be performed in 100 mM MES, pH 6.0 with similar results. For some proteins, better solubility and better coupling may be achieved at a higher coupling pH.

PBS, pH 7.4 (Alternate Coupling Buffer)*** 1000 mL

Reagent	Catalog Number	Final Concentration	Amount/ 1 L
PBS, pH 7.4	Sigma P3813	138 mM NaCl 2.7 mM KCl	1 packet

Filter Sterilize and store at 4°C

*** An alternative coupling buffer for proteins that do not couple well in 50-100 mM MES, pH 5.0-6.0.

PBS, 0.05% TWEEN-20, pH 7.4 (Wash Buffer) 1000 mL

Reagent	Catalog Number	Final Concentration	Amount/ 1 L
PBS, 0.05% TWEEN [®] 20, pH 7.4	Sigma P3563	138 mM NaCl 2.7 mM KCl 0.05% TWEEN	1 packet

Filter Sterilize and store at 4°C

PBS, 1% BSA, 0.05% Azide, pH 7.4

(PBS-BN Blocking/Storage Buffer) 1000 mL

Reagent	Catalog Number	Final Concentration	Amount/ 1 L
PBS, 1% BSA, pH 7.4	Sigma P3688	138 mM NaCl 2.7 mM KCl 1% BSA	1 packet
Sodium Azide	Sigma S8032	0.05% Azide	500 mg

Filter Sterilize and store at 4°C

PBS, 0.1% BSA, 0.02% TWEEN-20, 0.05% Azide, pH 7.4**(PBS-TBN Blocking/Storage Buffer)****1000 mL**

Reagent	Catalog Number	Final Concentration	Amount/ 1 L
PBS, pH 7.4	Sigma P3813	138 mM NaCl 2.7 mM KCl	1 packet
BSA	Sigma A7888	0.1% BSA	1 g
TWEEN [®] 20	Sigma P9416	0.02% TWEEN [®] 20	0.2 mL
Sodium Azide	Sigma S8032	0.05% Azide	500 mg

Filter Sterilize and store at 4°C**PBS, 1% BSA, pH 7.4 (Assay Buffer)****1000 mL**

Reagent	Catalog Number	Final Concentration	Amount/ 1 L
PBS, 1% BSA, pH 7.4	Sigma P3688	138 mM NaCl 2.7 mM KCl 1% BSA	1 packet

Filter Sterilize and store at 4°C