

Product Name: AllView PAGE Buffer

Code No:	DS520
Size:	500 ml (20 × stock solution)
Storage:	Store at Room Temperature (Protect from light)
Stability:	12 months at Room Temperature

Description

AllView PAGE Buffer is a new type of running buffer for SDS-PAGE electrophoresis. This buffer has a remarkable feature that enable us to separate proteins with wide range of molecular weights in the basic Laemmli gel (Tris-HCl) similar to using "gradient gel". The recommended acrylamide concentration is 6% for resolving gel and 3% for stacking gel to separate the entire range of about 10 kDa to 250 kDa. After electrophoresis, the polyacrylamide gel can be used directly for CBB staining, silver staining or western blotting.

Protocol

- 1. Dilute the AllView PAGE Buffer 20 times with ultrapure water.
 - (e.g. Add 25 ml of AllView PAGE Buffer to 475 ml of ultrapure water.)
- 2. Set the gel in electrophoresis chambers.
- 3. Fill the chambers with the $1 \times \text{AllView PAGE Buffer}$.
- 4. Load your samples and molecular weight markers.
- 5. Start electrophoresis.

Gel	Voltage	Time
Mini gel	250 V	13~15 min
$(8 \times 10 \text{ cm}, 1 \text{ mm thick})$	(Constant voltage)	

Note:

- AllView PAGE Buffer is suitable for Laemmli gels (see below "Recommended usage").
- If precast gels are used, the optimal acrylamide concentration may be different.
- AllView PAGE Buffer is not reusable.
- AllView PAGE Buffer is $20 \times$ stock solution. Please dilute to $1 \times$ solution before use.
- If precipitation of SDS is observed, completely dissolve it in a water bath (about 37°C) before use.
- Optimal electrophoretic time is depending on acrylamide concentration, gel size and voltage. Accordingly, it is recommended to monitor electrophoresis using a prestained MW Marker (e.g. ^{DynaMarker} Protein MultiColor Stable II, Code#DM660).
- Sometimes the gel become too hot during electrophoresis with two gels at the same time or with a large size gel. To avoid heat generation, use the chilled AllView PAGE Buffer and electrophorese in a cold room.



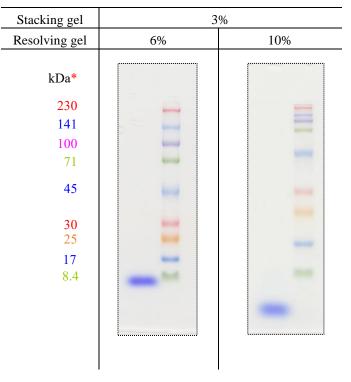
Recommended usage

The recommended acrylamide concentration is 6% for resolving gel and 3% for stacking gel to separate the entire range of about 10 kDa to 250 kDa. Especially if the separation of low molecular weight proteins (10 kDa~30 kDa) is required, 10% resolving gel is recommended.

1. Gel preparation (Laemmli's method)

	Stacking gel (6 ml)	Resolving	gel (15 ml)
Gel percentage	3%	6%	10%
Ultrapure water	3.9 ml	8.05	6.05
1.5M Tris-HCl (pH8.8)		3.75	3.75
0.5M Tris-HCl (pH6.8)	1.5		
30% Acrylamide/Bis solution	0.6	3.0	5.0
10% SDS	0.06	0.15	0.15
TEMED	0.003 (3 µl)	0.00375 (3.75 µl)	0.00375(3.75 µl)
10% APS	0.06	0.05	0.05

 Table 1. Recipes for polyacrylamide resolving and stacking gel (2 mini gels)



* DynaMarker Protein MultiColor Stable II, Code#DM660



2. Electrophoretic image

The mobility of proteins using AllView PAGE Buffer is different from Laemmli electrophoresis running buffer (Tris-Glycine-SDS). By using AllView PAGE Buffer and the Laemmli gels (Tris-HCl), a wide range of protein sizes can be separated like a gradient gels.

Stacking gel		39	6		
Resolving gel	6%		10%		
Buffer	Tris-Glycine- AllView PAGE		Tris-Glycine- AllView PAC		
	SDS buffer	Buffer	SDS buffer	Buffer	
	230	230	230		230 (kDa) 25 8.4
		* ^{DynaMarker} Prot	ein MultiColor Stab	ble II, Code#DM66	50

Related Products

Code	Product Name	Description
DM660	DynaMarker Protein MultiColor Stable II	The DynaMarker Protein MultiColor Stable II is a
		pre-stained protein molecular weight marker.
		The marker has a remarkable feature that it is
		possible to store at 4 °C.
DS500	QuickBlue Staining Solution	QuickBlue Staining Solution stains proteins in
		polyacrylamide gel after SDS gel electrophoresis
		(detection limit ≥ 8 ng of protein) with
		*Coomassie-G250. All processes including
		washing and destaining processes can be
		performed in 1.5 hr.