

Product Name: AllView PAGE Buffer (20×)

Code No:	DS520
Size:	500 ml (20 × stock solution)
Storage:	Store at Room Temperature (Protect from light)
Stability:	2 years at Room Temperature

Description

AllView PAGE Buffer (20×) 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

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

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

Note:

- AllView PAGE Buffer (20×) is suitable for Laemmli gels (see below "Recommended usage").
- If precast gels are used, the optimal acrylamide concentration may be different.
- AllView PAGE Buffer (20×) is not reusable.
- AllView PAGE Buffer (20×) is 20 × stock solution. Please dilute to 1 × 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 1 × AllView PAGE Buffer and electrophorese in a cold room.



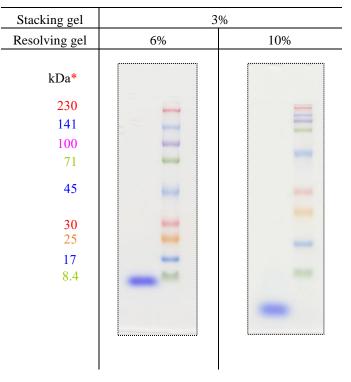
Recommended usage

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



Electrophoretic image 2.

The mobility of proteins using AllView PAGE Buffer (20×) is different from Laemmli electrophoresis running buffer (Tris-Glycine-SDS). By using AllView PAGE Buffer (20×) and the Laemmli gels (Tris-HCl), a wide range of protein sizes can be separated like a gradient gel.

Stacking gel	3%			
Resolving gel	6	%	1	0%
Buffer	Tris-Glycine-	AllView PAGE	Tris-Glycine-	AllView PAGE
	SDS buffer	Buffer (20×)	SDS buffer	Buffer (20×)
	230	230 45 8,4	230	230 (kl

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.