

# Choose the appropriate gel for your protein electrophoresis based on the migration pattern below using MOPS buffer (see manual for migration chart using MES buffer).

| Wells | Max. Vol/well |
|-------|---------------|
| 10    | 80 μΙ         |
| 12    | 60 µl         |
| 15    | 40 μΙ         |

2. Prepare the gel tank. Using MOPS (Cat. No. M00138) or MES buffer (Cat. No. M00677) as the running buffer.

# ★ Compatible gel tanks:

-Bio-Rad Mini-Protean (II/3/Tetra System) -Hoefer Might Small (SE 250/ SE 260)

-Invitrogen Novex XCell I, II, & Surelock

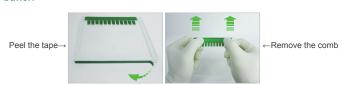
\*see manual or website for complete list

| 8%   |   | 10%  |             | 12%  |   |
|--|---|--|-------------|--|---|
| MES  | MOPS  | MES  | MOPS        | MES  | MOF   |
|  |   | 27060  |             | 27002  | 270KD   |
| 2708D  | 2700  | 17560-   | 27900       | 12000  | 175KD   |
| 1758D-   | 27000   | 800  | 17900       | 6000   |   |
| 12002  | 17500   |  | 1200        |  | 8000-   |
| 800  | 12000   | 6065   | 890         | 4000   | 6010  |
| 6002   |   | 5000   | 800         | toro.  | 50KD  |
|  | 1000  | 4060   | 60KD        |  | 4002  |
| 5002   |   | 3060   |             |  | 30VD  |
| 4082   | 6000  |  | 5000        | 2003   | 3000  |
| 3002   |   | 2062   | 4000-       | 1500   |   |
| 2007   | 5000-   | 1582   | 3000        | 1000-  |   |
| 1500-  | 1000  | 1062   |             | 500-   | 20KD  |
| 1000   | 100   | 560  | 2000        |  | 1000  |
|  |   |  |             |  |   |
| 502  |   |  |             |  |   |
|  |   | 8-1  | 6%          | 4-2  | 0%  |
| 4-12<br>MES  |   | 8-1<br>MES   | 6%<br>MOPS  | 4-2<br>MES   |   |
| 4-12<br>MES  | 2%  |  | MOPS        | MES  | MOF   |
| 4-12<br>MES  | 2%  | MES  |             | MES  | MOF   |
| 4-12<br>MES  | 2%<br>MOPS  | MES  | MOPS        | MES  | 27012-  |
| 4-12<br>MES  | 2%<br>MOPS  | MES  | MOPS        | MES<br>2700  | 27012-  |
| 4-12<br>MES  | 2%<br>MOPS  | 77000  | MOPS 27000  | MES  | 27002   |
| 4-12<br>MES<br>27005———————————————————————————————————  | 2%<br>MOPS  | MES  27000   | MOPS        | MES<br>2700  | 27000   |
| 4-12<br>MES<br>27000——————————————————————————————————   | 2%<br>MOPS  | 77000  | MOPS  22000 | MES 2700   | 27002   |
| 4-12<br>MES<br>27005———————————————————————————————————  | 2% MOPS 2780 11580 1280 6600 6600                 | MES  27000   | MOPS  22000 | MES  2700  2700  600  600  500  500  500  500  500     | 27000   |
| 4-12<br>MES<br>27065———————————————————————————————————— | 2% MOPS  2780                                     | 7000   | MOPS  22000 | MES 2700   | 27000— 27000— 27500— 2000— 2000— 2000— 2000— 2000— 2000— 2000—  |
| 4-12 MES 27000   | 2% MOPS  2780———————————————————————————————————— | MES  27000   | MOPS  22000 | MES  2780  1388  800  600  400  1300  1300  1300  1300 | 27002   |
| 4-12 MES 27085   | 2% MOPS  2780                                     | 7000   | MOPS  2780  | MES  2776  2776  380  800  600  200  2100  2100  1100  | 2000— 27500— 17500— 12000— 8000— 6000— 6000— 2000— 2000—  |
| 4-12 MES 27000   | 2% MOPS  2780———————————————————————————————————— | MES  27000 17500 17500 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 | MOPS  2780  | MES  2776  2776  380  800  600  200  2100  2100  1100  | 2000— |

# Sample preparation:

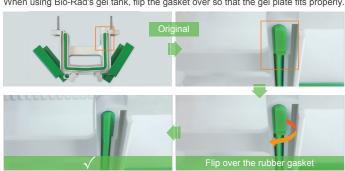
Heat the sample at 70°C for 10 min, spin down the sample before loading. We recommend using 4×LDS sample buffer (Cat. No. M00676), see manual for detail.

3. Peel the tape at the bottom of the gel plate, remove the comb gently, then insert the gel into the gel running apparatus and add running buffer.



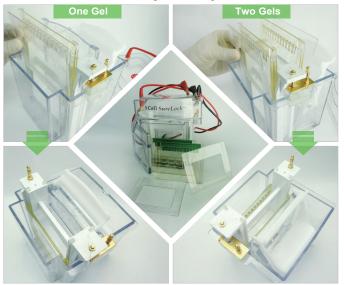
#### For Bio-Rad Mini-PROTEAN (II/3/Tetra):

When using Bio-Rad's gel tank, flip the gasket over so that the gel plate fits properly.



### For Invitrogen Novex Xcell I, II & SureLock®:

Adapters provided in the gel package are needed since the thickness of SurePage cassette is thinner than that of Invitrogen NuPAGE gel cassette.



# 4. Sample loading.

You can use 10 µl pipette tip to load samples into the wells easily. Make sure that the loading tip is inserted into the sample well vertically for optimal result and to avoid inserting the tip into the groove on the back plate.









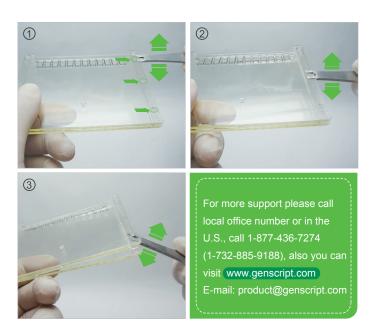
# 5. Running conditions.

| Running Buffer | Voltage | Started Current | Finished Current | Run Time per Gel |
|----------------|---------|-----------------|------------------|------------------|
| MOPS           | 200 V   | 95-120 mA       | 35-55 mA         | 30+ Minutes      |
| MES            | 200 V   | 110-130 mA      | 50-70 mA         | 20+ Minutes      |

The running time may vary depending on your power supply and the gel percentage.

# 6. Open the cassette with an opener or a screw driver to remove the gel.

Stain your gel with Genscript's eStain L1 automatic Protein Staining System (L00657) and get high quality result in 10 min!



Open the cassette with GenScript's opener or a screw driver.