



Tips for Selecting the Best Gel for Your Application

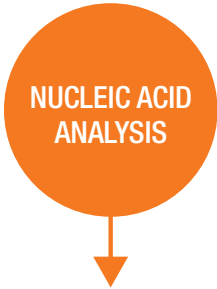
By Geetha Yadav

You have determined that electrophoresis is the next step in your experiment. With so many variables to consider before picking the gels, how do you know what the best gel is for your application? Here is an easy guide that takes you step by step through your selection process.

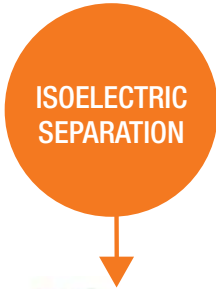
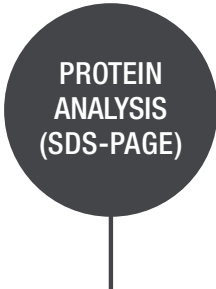
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TIPS FOR SELECTING THE BEST GEL FOR YOUR APPLICATION

WHAT IS THE PURPOSE OF YOUR EXPERIMENT?

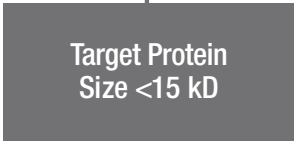


- Mini-PROTEAN® TBE Precast Gels [☑](#)
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- Criterion™ TBE Precast Gels [☑](#)
- Criterion TBE-Urea Precast Gels [☑](#)



- Criterion IEF Precast Gels [☑](#)

WHAT'S THE SIZE OF YOUR TARGET PROTEIN?



- Mini-PROTEAN Tris-Tricine Precast Gels [☑](#)
- Criterion Tris-Tricine Precast Gels [☑](#)



- Criterion XT Bis-Tris Precast Gels [☑](#)
- Mini-PROTEAN® TGX™ Precast Gels [☑](#)



- Criterion XT Tris-Acetate Precast Gels [☑](#)

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WHAT'S THE BEST GEL CHEMISTRY FOR YOUR SAMPLE AND APPLICATION?

Sample buffer with high salt and high nonionic detergent concentration*

Sample buffer with low salt and low nonionic detergents



Bis-Tris Gels 
(MOPS, MES Buffer)



Mini-PROTEAN TGX Precast Gels 
Mini-PROTEAN® TGX Stain-Free™
Precast Gels 
(Laemmli/Tris/Glycine/SDS)

* Buffer exchange or dialysis can reduce salt and ionic detergents and lets the sample be run on TGX gels.

- Faster run times
- Better transfer efficiency

WHAT'S THE BEST PERCENTAGE GEL FOR YOUR APPLICATION?

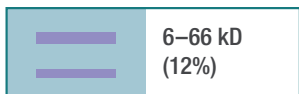
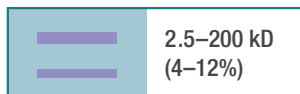
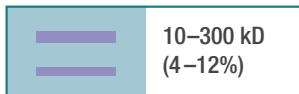
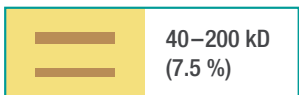
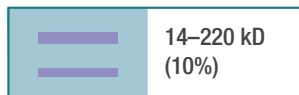
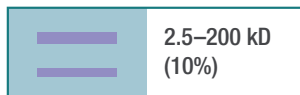
WHAT'S THE BEST PERCENTAGE GEL FOR YOUR APPLICATION?

Resolution of proteins <50 kD

Resolution of proteins >50 kD

Size range between proteins is narrow

Size range between proteins is broad



MES Buffer

MOPS Buffer

Single Percentage Gels

Gradient Gels

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TO RUN MORE THAN 12 SAMPLES



USE MIDI-FORMAT GELS

Criterion Gels

Available Well Volumes

12+2 wells: 45 µl
18 wells: 30 µl
26 wells: 15 µl

HOW MANY SAMPLES DO YOU WANT TO RUN?

5–15 samples

More than 12 samples



USE MINI-FORMAT GELS

**Mini-PROTEAN TGX
Precast Gels**

Available Well Volumes

10 wells: 50 µl/30 µl
12 wells: 20 µl
15 wells: 15 µl



USE MIDI-FORMAT GELS

**Criterion TGX
Precast Gels**

Available Well Volumes

12+2 wells: 45 µl
18 wells: 30 µl
26 wells: 15 µl

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