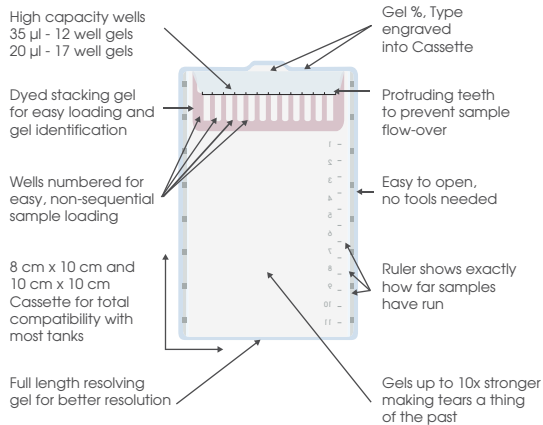


# RunBlue™ Precast Gels

Offering superior rigidity and stability



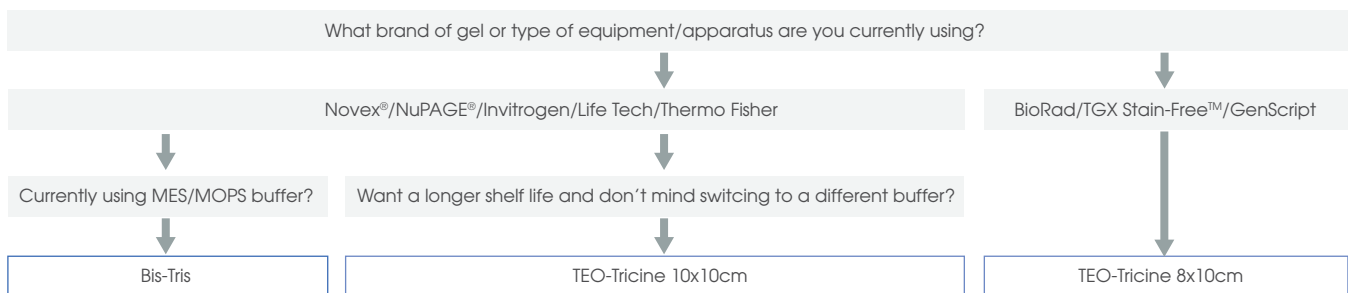
Proprietary photo-polymerization process for **sharper bands** and batch-to batch consistency

Composite gel technology enables durable gels with longer shelf-life, **10 times stronger** than other brands

Optimized running buffer offers **low heat generation**

Compatible with commonly used electrophoresis equipment

## Product selection guide



## Product information

Each box contains 10 cassettes	Gel percentage	Bis-Tris Precast Gels - RunBlue™		TEO-Tricine Precast Gels - RunBlue™*		
		12 well	17 well	2 well	12 well	17 well
10 x 10 cm cassette Compatible with SureLock™ tanks	8%	ab270021	ab270462		ab139591	ab139597
	10%	ab270463	ab270464		ab119202	ab139598
	12%	ab270465	ab270466		ab119203	ab139599
	16%				ab139592	ab139600
	4-8% (Gradient)				ab119204	ab139601
	4-12% (Gradient)	ab270467	ab270469		ab139593	ab139602
	4-20% (Gradient)			ab270461	ab119205	ab139603
	8 x 10 cm cassette Compatible with Mini-PROTEAN® Tetra Cell	8%				ab139594
10%				ab119206	ab139605	
12%				ab119207	ab139606	
16%				ab139595	ab139607	
4-8% (Gradient)				ab119208	ab139608	
4-12% (Gradient)				ab139596	ab139609	
4-20% (Gradient)				ab119209	ab139610	

\* TEO-Tricine gel requires sample buffer (ab119196) and running buffer (ab270468) to run together

# Western Blot

## Sample preparation

Lysis of sample in appropriate lysis buffer (eg. RIPA).

(Protein assay to determine protein concentration)

Reduce and denature sample (unless stated otherwise on antibody datasheet).  
Add sample buffer (SDS and  $\beta$  mercaptoethanol). Heat 95°C 5 min.

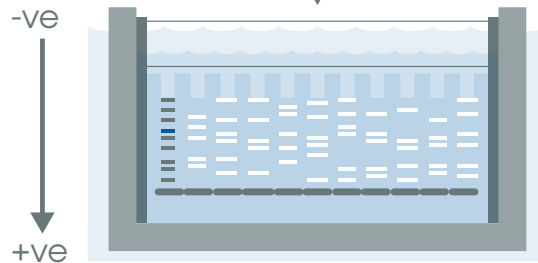
## Loading the gel

Optimize lysate amount depending on expression level of the protein.

(Prepare running buffer. Assemble the gel in the tank)

## Running the gel

Smaller proteins (negatively charged) move more quickly through the gel towards the positive cathode. Proteins separate out according to size.



100 V - 200 V for 30 min to 2 hrs.  
Optimize time and voltage.  
Follow manufacturers instructions.

Gel percentage depends on size of protein:

4-40 kDa	20%
12-45 kDa	15%
10-70 kDa	12.5%
15-100 kDa	10%
25-200 kDa	8%

## Transfer proteins from the gel to membrane

Prepare transfer buffer.  
Cut a piece of membrane.  
Transfer the membrane to 1 x transfer buffer.

(Assemble transfer stack)



Optimize transfer time and voltage depending on the size of your protein. Follow manufacturers instructions.

Negatively charged proteins move up towards the positive cathode and onto the membrane.

Check the transfer. Ponceau red staining of the membrane or Coomassie staining ([ab119211](#)) of the gel.

## Blocking

Incubate membrane in the appropriate blocking buffer for your antibody i.e. milk or BSA ([ab270701](#)).  
Check which blocking buffers have been previously validated for use with your specific antibody.

## Primary antibody incubation

Band of protein/antigen on membrane

Incubate membrane in primary antibody diluted in blocking buffer for 1-2 hrs RT or 4°C overnight at the recommended concentration.

## Secondary antibody incubation

Primary antibody

Incubate with secondary antibody (eg HRP conjugated) diluted in blocking buffer for 1-3 hrs RT at the recommended concentration.

## Detection (eg. ECL detection)

Conjugated secondary antibody

Substrate eg Hydrogen peroxide + luminol  
3-aminophthalate (light sensitive product)

Scan and analyze results