

### Introduction

CosmoPAGE Bis-Tris Precast Gel is a high-performance and easy to use precast polyacrylamide gel for electrophoresis in Bis-Tris buffer system (MOPS or MES). The optimized gel formula allows CosmoPAGE Bis-Tris Precast Gel to show improved resolution, accurate results, and an extended shelf-life over conventional gel. CosmoPAGE Bis-Tris Precast Gels are available in gradient (4 to 12%) and fixed (12%) concentrations of polyacrylamide in 15-well formats.

### **Product Information**

Product	Cat. No.	Gel % / # of well	QTY
CosmoPAGE Bis-tris	NU001215	12% / 15 wells	10 gels
Precast Gel			
CosmoPAGE Bis-tris	NU041215	4 - 12 % / 15 wells	10 gels
Precast Gel			

## Storage

4°C

# Shelf Life

12 months

### **Features**

- Compatible with Bio-Rad Mini-PROTEAN® CORE
- No combs and tape
- Sharp, straight bands
- Numbered well; loading volume up to 28 μl/wells

#### **Procedures**

#### **Running Buffer**

Dissolve CosmoPAGE MOPS Running Buffer in 1000 ml of deionized water to make the 1X MOPS running buffer. Or prepare 10X stock running buffer with the following recipe: 10X MOPS running buffer:

Tris base  $60.6 \, \text{g}$ , MOPS  $104.6 \, \text{g}$ , SDS  $10.0 \, \text{g}$ , EDTA  $3.0 \, \text{g}$ . Deionized water to  $1000 \, \text{ml}$ .

10X MES running buffer preparation:

Tris base 60.6 g, MES 97.6 g, SDS 10.0 g, EDTA 3.0 g.

Deionized water to 1000 ml

\*Always use fresh 1X running buffer

### **Sample Preparation**

Mix sample with 2X sample buffer. Heat the diluted samples at  $90-95^{\circ}$ C for 5 min.

Recipe of 2X sample buffer with reducing agents:

62.5 mM Tris-HCl pH 6.8, 2% SDS, 25% (v/v) glycerol, 0.01% bromophenol blue, and 100 mM DTT (or 5%  $\beta$ -mercaptoethanol) as reducing agent.

### Setting CosmoPAGE Precast Gel into Bio-Rad Mini-PROTEAN® Core

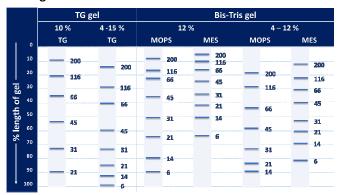
Totally the same way to place CosmoPAGE precast gels and Bio-Rad Mini-PROTEAN gels; no adaptors required.

**Running Conditions** 

	100 V	150 V	200 V
Running time	90 min.	60 min.	35 min.
Current			
Initial per gel	15-20 mA	50-60 mA	100-110 mA
Final per gel	5-10 mA	20-30 mA	30-40 mA
TEMP.	25°C	25-35°C	25-35°C

Running time might vary depending on power supply and the temperature of gel, running buffer and lab.

### **Gel Migration chart**



Migration patterns of Unstained Protein Markers (#29458-24)

# **Gel staining**

- Insert a cassette opener into four corners of cassettes.
- Carefully pry but not twist the opener to separate two plates.
- 3. Gently remove the gel from the plate.
- 4. Follow a procedure of most popular staining methods, such as Coomassie dyes (R-250 or G-250), Silver-stain solution, and fluorescent.

#### **Gel blotting**

Follow the general guidelines for your blotting apparatus; compatible to wet, semi-dry, or dry transferred to PVDF or nitrocellulose membrane.

## **Technical Support**

E-mail: info@nacalaiusa.com Website: www.nacalaiusa.com

Rev. 03/2020