

Latitude® HT Precast Gels

Ready-to-use agarose gels for high-throughput DNA electrophoresis.

Introduction

Latitude® HT Precast Gels are designed for fast, accurate high-throughput DNA analysis. Latitude® HT Gels are manufactured from high-quality, Lonza Rockland, Inc. molecular biology grade SeaKem® and NuSieve® Agarose and are precision cast for reproducible results every time.

Latitude® HT Gels fit most large electrophoresis chambers. We recommend the following systems:

- OWL Millipede™ Horizontal System
- OWL Centipede™ Horizontal System (24 x 14 cm gels only)
- Bio-Rad® Sub-Cell™ Models 96 and 192 systems
- FisherBiotech™ Wide-Format Horizontal System FB-SB-2318

Read Before Following the Protocol

- **CAUTION!: These gels may contain 0.5 µg ethidium bromide/ml. Ethidium bromide is a powerful mutagen.** Wear suitable protective clothing and safety glasses, and refer to MSDS for safety precautions. Always wear gloves when opening pouches and handling gels and any solutions containing ethidium bromide. Decontamination of ethidium bromide is described in Sambrook et al., *Molecular Cloning, A Laboratory Manual* (1989), 6.16-6.17.

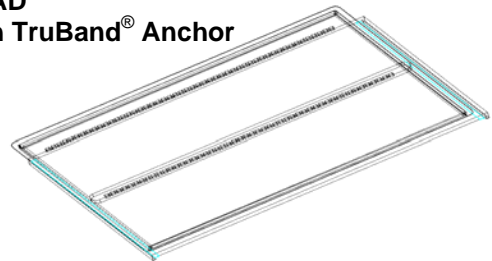
Avoid skin and eye exposure to UV light.

- **Do not drop Latitude® HT Gels as the wells will crack.**
- **For best band resolution, add 0.5 µg ethidium bromide per ml to the running buffer.**
- **Latitude® HT Gels must be used with the TruBand® Anchor to achieve optimal results.** See diagram on right. Some chambers such as the OWL Millipede A6, the OWL Gator™ A3-1 and the FisherBiotech FB-SB-2318 require a narrow TruBand® Anchor. Lonza can also provide platform extensions to improve the gel fit for your existing chamber. Contact Lonza Technical Service for details (800) 521-0390.

Instructions

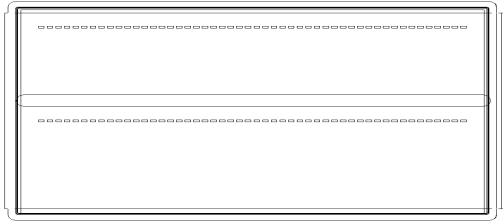
1. Cut the pouch open on one end and remove the gel. **Exercise caution when removing the gel as the pouch contains a small amount of buffer that may contain ethidium bromide.**
2. Leave the gel in the tray and place directly on the chamber platform.
3. Cover the gel with the appropriate buffer (1X TAE or 1X TBE) to a **depth of 2 mm-3 mm** over the gel surface.
4. Place the appropriate size Lonza TruBand® Anchor over the tray so that the white gaskets fit snugly on the flanges on the short ends of the tray. Position the anchor so that both the top and middle tiers of wells are exposed.

LOAD with TruBand® Anchor



5. Add buffer until the level is even with the top of the anchor. **Very Important! Do not flood buffer over the top of the anchor.** It is better to have the buffer level slightly below the top of the anchor than even with the top of the anchor.
6. Load DNA samples following standard procedures. The gels are configured for alternate or consecutive-well loading using an 8 or 12 tip multi-channel pipette.

7. Shift the TruBand[®] Anchor so that it is centered over the gel and all wells are completely covered before beginning electrophoresis.



**RUN
with TruBand[®] Anchor**

8. Electrophorese the gel at 5-10 V/cm interelectrode distance, until the bromophenol blue is about 1 cm from the bottom of the gel or from any row of wells.
9. Remove the anchor, and remove the gel tray from the chamber. Carefully remove the gel from the tray and place on the UV light box. Photograph as usual. If the smaller DNA fragments are not detected, briefly stain the gel (10 to 15 minutes) in 0.5 µg/ml ethidium bromide.

Product Information

Call Lonza Technical Service at (800)-521-0390 for ordering information or visit www.Lonza.com.

Gels contain 0.5 µg/ml ethidium bromide and are offered 5 gels/box in the following configurations:

- 1X TBE or 1X TAE
- 1%, 2%, 3.6% or 4% agarose
- 24x14 cm, 2x50 wells, 10-12 µl/well, alternate well multichannel pipette loading
- 24x14 cm, 4x50 wells, 10-12 µl/well, alternate well multichannel pipette loading
- 24x20 cm, 6x50 wells, 10-12 µl/well, alternate well multichannel pipette loading
- 24x14 cm, 4x25 wells, 25 µl/well, consecutive well multichannel pipette loading
- 24x14 cm, 8x25 wells, 25 µl/well, consecutive well multichannel pipette loading

Catalog No.	Chamber
TruBand [®] Anchor for 24x20 cm gels	
56998	For Owl Millipede [™]
56992	For Other standard chambers
TruBand [®] Anchor for 24x14 cm gels	
56991	Owl Millipede Shelton JBS-96 Fisher SB-2318
56993	Other standard chambers

Related products

AccuGENE[®] TAE and TBE Buffers
DNA Markers
DNA Ladders

For Laboratory Use.

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