

2-D ELECTROPHORESIS

ReadyPrep™ 2-D Starter Kit

Part of the ProteomeWorks™ System

- **The easy start to 2-D —**
Quality results the first time
- **Performance tested —**
Validate your 2-D system
- **Includes a complex protein sample —**
Detect hundreds of spots
- **Premixed buffers and reagents —**
Consistent and convenient
- **Scaled to fit your system —**
Mini-PROTEAN 3™, Criterion, or PROTEAN SDS-PAGE formats
- **Detailed protocol —**
Confidence for new users

Control Kit for New or Experienced Users of 2-D Electrophoresis

Introduction

The ReadyPrep 2-D starter kit is a complete set of reagents to perform 2-D gel electrophoresis under highly controlled conditions. This allows you to focus on your technique, not your sample and reagent prep, when getting started. This set of control reagents can also be used to validate your 2-D electrophoresis system. The kit contains a complex protein sample (*E. coli*) and all the buffers needed to focus the sample and then equilibrate and load them onto the second-dimension SDS-PAGE gel. The step-by-step instructions are easy to follow and provide useful tips for first-time

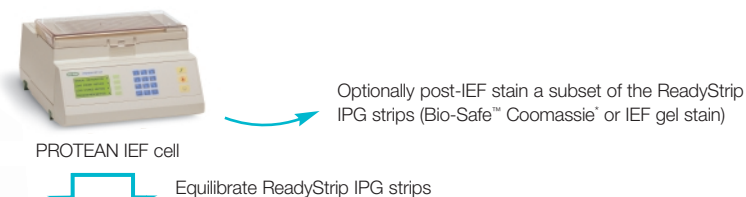
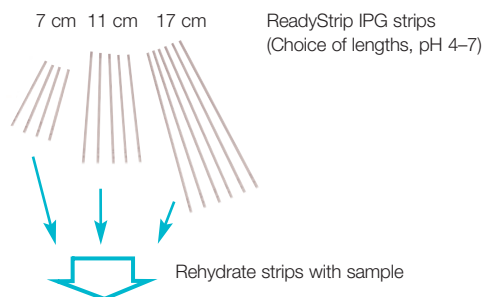
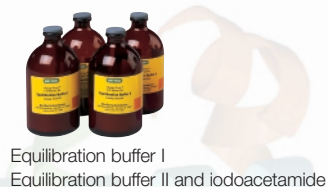
users of the PROTEAN® IEF cell and ReadyStrip IPG strips. With this kit you can test your system and technique and then proceed to separating your own samples with confidence.

2-D Start to Finish

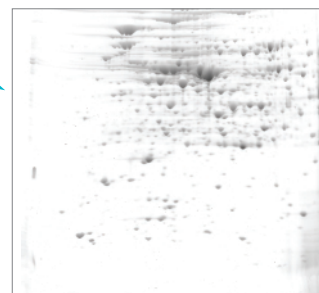
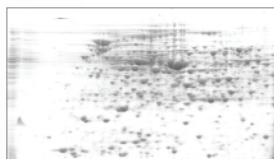
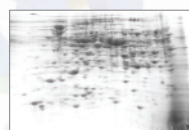
Each kit includes all reagents required to:

- Prepare a protein sample (*E. coli*)
- Rehydrate IPG strips with sample
- Equilibrate IPG strips for SDS-PAGE
- Overlay IPG strips with agarose on SDS-PAGE gels

ReadyPrep 2-D starter kit:



SDS-PAGE (8–16%)



Stain gels
(Bio-Safe Coomassie or
Coomassie R-250 stain)

BIO-RAD

Customize to Fit Your System

The ReadyPrep 2-D starter kit is designed to work with all 3 Bio-Rad SDS-PAGE systems. Choose the system you want to use, and then order the appropriate ReadyStrip IPG strips and precast gels to go with the kit. Use:

- 7 cm ReadyStrip pH 4–7 IPG strips (163-2001) and Ready Gel 8–16% precast gels (161-1394) for the Mini-PROTEAN 3 system
- 11 cm ReadyStrip pH 4–7 IPG strips (163-2015) and Criterion 8–16% gels (345-0041)
- 17 cm ReadyStrip pH 4–7 IPG strips (163-2008) and PROTEAN* 8–16% gels (161-1453)

2-D Starter Kit Individual Reagents

***E. coli* protein sample** — Use this complex protein sample as a control to validate your 2-D reagents and protocol

Rehydration/sample buffer — This standard formulation is appropriate for many protein samples; prepare your sample with confidence using this performance-tested buffer

Equilibration buffer I and buffer II — These buffers offer premixed convenience for faster 2-D SDS-PAGE setup. Each vial reconstitutes to 20 ml; buffer I contains DTT, buffer II requires the addition of iodoacetamide

Iodoacetamide — Add this to complete equilibration buffer II, or use when preparing your own equilibration buffers

ReadyPrep overlay agarose — Save time setting up your 2-D gels and monitor the electrophoresis with the included Bromophenol Blue tracking dye

Specifications

2-D Starter Kit Contents

Protein sample	<i>E. coli</i> extract, lyophilized, 2.7 mg
IPG rehydration/ sample buffer	8 M urea, 2% CHAPS, 50 mM DTT, 0.2% Bio-Lyte™ 3/10 ampholyte, 0.001% Bromophenol Blue, 1 per kit
Equilibration buffer I	375 mM Tris-HCl, pH 8.8, 6 M urea, 2% SDS, 2% DTT, 2 per kit
Equilibration buffer II	375 mM Tris-HCl, pH 8.8, 6 M urea, 2% SDS, 2 per kit
Glycerol solution	30% (v/v) ultrapure glycerol, 70 ml, 1 per kit
Agarose	0.5% low melt agarose, 1x Tris-glycine-SDS, 0.001% Bromophenol Blue, 50 ml, 1 per kit
Iodoacetamide	0.5 g, 2 per kit
Nanopure water	15 ml, 1 per kit



Ordering Information

Catalog # Description

ReadyPrep 2-D Starter Kits and Reagents

163-2105	ReadyPrep 2-D Starter Kit, includes protein sample and reagents sufficient to rehydrate, focus, and transfer to second-dimension gels six 17 cm, ten 11 cm, or sixteen 7 cm ReadyStrip IPG strips (ReadyStrip IPG strips and precast SDS-PAGE gels and gel stains not included in the kit)
163-2106	ReadyPrep 2-D Starter Kit Rehydration/Sample Buffer, 1 vial, lyophilized, reconstitutes to 10 ml
163-2107	ReadyPrep 2-D Starter Kit Equilibration Buffer I, with DTT, 1 vial, lyophilized, reconstitutes to 20 ml
163-2108	ReadyPrep 2-D Starter Kit Equilibration Buffer II, without DTT or iodoacetamide, 1 vial, lyophilized, reconstitutes to 20 ml
163-2109	Iodoacetamide, 30 g
163-2110	<i>E. coli</i> Protein Sample, lyophilized, 2.7 mg
163-2111	ReadyPrep Overlay Agarose, 50 ml
161-0786	Bio-Safe Coomassie Stain, 1 L
161-0434	IEF Gel Staining Solution, 1 L
161-0435	Coomassie Brilliant Blue R250 Staining Solution Kit

* 17 cm IPG strips fit PROTEAN II Ready Gel precast gels and PROTEAN XL and PROTEAN Plus handcast gels without trimming.

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BIO-RAD

**Bio-Rad
Laboratories, Inc.**

Life Science
Group

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