

2-D ELECTROPHORESIS

ReadyStrip™ IPG Strips

Part of the ProteomeWorks™ System

- **Innovative**
24 cm ReadyStrip IPG strips with unique bar code feature
- **Consistent**
True linear pH gradients and tight gel length tolerances
- **Versatile**
Five strip lengths to fit all second-dimension systems

Broad-, Narrow-, and Micro-Range pI Resolution for Multiple 2-D Gel Formats

Introduction

ReadyStrip IPG (immobilized pH gradient) strips are dehydrated polyacrylamide gels cast on solid film. These gels consist of IPG monomers (acrylamide derivatives with various pKs) covalently bound to the polyacrylamide matrix. IPG strips are used for isoelectric focusing of proteins in the first

dimension of 2-D gel electrophoresis.

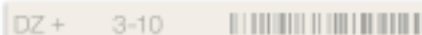
In the past, 2-D separations were performed with tube gels and ampholytes, which made it very difficult to achieve reproducible results, due to cathodic drift and the fragility of the gels. The introduction of IPG strip technology simplified the technique while offering greater reproducibility, with the

immobilized pH gradient on an easy-to-handle supported strip.



Innovation

- New! 24 cm ReadyStrip IPG strips with bar coding. Unique bar code feature on every 24 cm ReadyStrip IPG strip provides convenient sample tracking



Label and bar code on 24 cm ReadyStrip IPG strip.

- Micro-range gradients for the ultimate in resolution — zoom in on an area of interest or fine-map an entire proteome; strips are carefully designed with sufficient overlap to allow spot matching while limiting the extent of redundant data
- Narrow, overlapping pH gradients (3–6, 5–8, 7–10) for greater resolution with more centimeters of gel per pH unit, for stand-alone use or for the creation of overlapped “virtual” gels (see images on back)

Consistency

ReadyStrip IPG strips provide run-to-run reproducibility with tight gel length tolerances of ± 2 mm, yielding consistent pI separations and allowing the direct comparison of spots from one gel to another.

Versatility

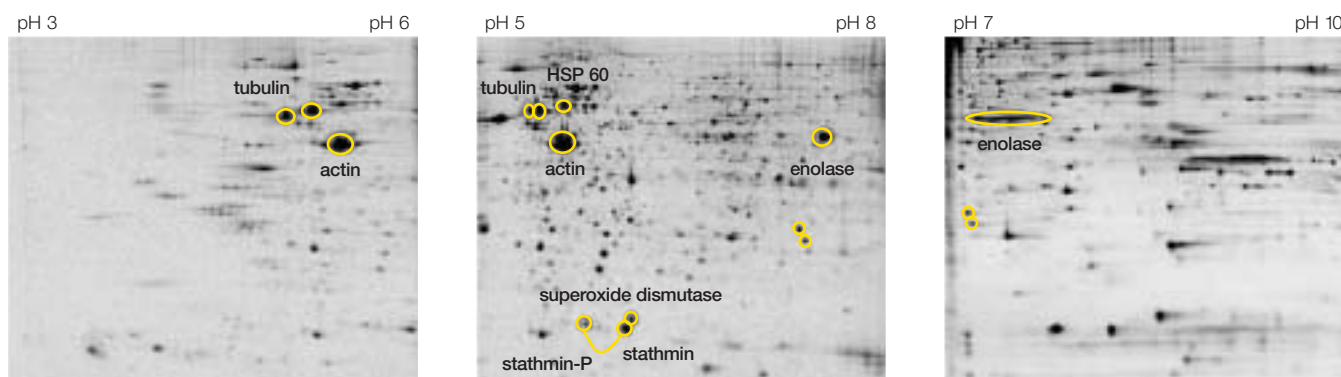
Strip lengths are appropriate for mini and large formats to accommodate high-throughput method development and maximum resolution.

Convenience

Each precast ReadyStrip IPG strip is clearly and permanently labeled to mark the anode and the pH range, eliminating mix-ups. In addition, 24 cm strips carry a bar code as well as user-readable characters to simplify tracking of strips in high-throughput laboratories.

2-D gel electrophoresis has become an increasingly important tool in the emerging field of proteomics. In support of this new field, Bio-Rad has developed the integrated ProteomeWorks system, which provides the tools necessary for all aspects of proteome research — from sample preparation and IEF to image analysis and protein identification. For more information, request bulletin 2619 or visit our ProteomeWorks web site at www.proteomeworkssystem.com

BIO-RAD



Criterion™ Gels for Mini Format 2-D Runs

The Criterion gel and ReadyStrip 11 cm IPG strip provide:

- An optimum combination of pI separation and fast run times
- Error-free setup with “drop-in” gel and cell design
- 60% greater pI separation in the first dimension than other mini gels
- <1 hr second-dimension run times for “2-D in a day” capability

Screening of samples is simplified using ReadyStrip IPG strips of overlapping ranges. Three narrow pH range 17 cm ReadyStrip IPG strips increase resolution by creating a virtual gel equivalent to 40 cm of separation across a pH 3–10 range. Resolving power is increased, allowing definition of proteins not visible by traditional methods. Data provided by Sjouke Hoving, Hans Voshol, and Jan van Oostrom of Novartis Pharma AG, Basel, Switzerland.

Specifications

	ReadyStrip IPG Strip Length				
	7 cm Strips	11 cm Strips	17 cm Strips	18 cm Strips	24 cm Strips
Strip length	7.9 ± 0.1 cm	11.8 ± 0.1 cm	17.8 ± 0.1 cm	19.0 ± 0.1 cm	24.7 ± 0.1 cm
Gel length	7.3 ± 0.2 cm	11.0 ± 0.2 cm	17.1 ± 0.2 cm	18.0 ± 0.2 cm	23.4 ± 0.2 cm
Gel composition	4% T, 3% C	4% T, 3% C	4% T, 3% C	4% T, 3% C	4% T, 3% C
Strip width	3.3 mm	3.3 mm	3.3 mm	3.3 mm	3.3 mm
Gel thickness	0.5 mm	0.5 mm	0.5 mm	0.5 mm	0.5 mm
Second-dimension* SDS-PAGE system	Mini-PROTEAN® 3 cells/ Ready Gel® precast gels	Criterion cells/ Criterion precast gels	PROTEAN® XL cells/ PROTEAN II Ready Gel precast gels	PROTEAN® Plus Dodeca™ cell/ 20 x 20.5 cm plates	PROTEAN Plus Dodeca cell/ 25 x 20.5 cm plates

* The PROTEAN IEF cell, for first-dimension isoelectric focusing, accommodates all Bio-Rad's strip sizes

Ordering Information						Catalog #	Description
ReadyStrip IPG Strips, 12 per Package						Companion Products to ReadyStrip IPG Strips	
pH Range	7 cm	11 cm	17 cm	18 cm	24 cm	163-2130	ReadyPrep™ 2-D Cleanup Kit, 50 preps
3–10	163-2000	163-2014	163-2007	163-2032	163-2042	163-2090	ReadyPrep Reduction-Alkylation Kit, 100 preps
3–10 nonlinear (NL)	163-2002	163-2016	163-2009	163-2033	163-2043	163-2089	ReadyPrep Protein Extraction Kit (Cytoplasmic/Nuclear), 50 preps
4–7	163-2001	163-2015	163-2008	163-2034	163-2044	163-2088	ReadyPrep Protein Extraction Kit (Membrane I), 50 preps
3–6	163-2003	163-2017	163-2010	163-2035	163-2045		ReadyPrep Protein Extraction Kit (Signal), 50 preps
5–8	163-2004	163-2018	163-2011	163-2036	163-2046	163-2087	ReadyPrep Proteomics Grade Water, 500 ml
7–10	163-2005	163-2019	163-2012	163-2037		163-2100	ReadyPrep Sequential Extraction Kit
3.9–5.1	163-2028	163-2024	163-2020	163-2038		163-2105	ReadyPrep 2-D Starter Kit
4.7–5.9	163-2029	163-2025	163-2021	163-2039		163-2092	PROTEAN Plus Overlay Agarose, 125 ml
5.5–6.7	163-2030	163-2026	163-2022	163-2040		163-2111	ReadyPrep Overlay Agarose, 50 ml
6.3–8.3	163-2031	163-2027	163-2023	163-2041		163-2129	Mineral Oil, biotechnology grade, 500 ml
Catalog #	Description					165-4071	Precut Filter Paper Wicks, 500
Bio-Lyte® IEF Buffers*						165-4035	Disposable Rehydration/Equilibration Tray With Lid, 7 cm, 25
163-2094	100x Bio-Lyte 3/10 Ampholyte, 1 ml**					165-4025	Disposable Rehydration/Equilibration Tray With Lid, 11 cm, 25
163-2093	100x ReadyStrip 7–10 Buffer, 1 ml					165-4015	Disposable Rehydration/Equilibration Tray With Lid, 17 cm, 25
163-2098	100x ReadyStrip 3.9–5.1 Buffer, 1 ml						
163-2097	100x ReadyStrip 4.7–5.9 Buffer, 1 ml						
163-2096	100x ReadyStrip 5.5–6.7 Buffer, 1 ml						
163-2095	100x ReadyStrip 6.3–8.3 Buffer, 1 ml						

* Dilute ReadyStrip buffers to 1x final in each sample to equal 0.2% Bio-Lyte ampholyte.

** Use 163-2094 for ReadyStrip pH 3–10, 4–7, 3–6, and 5–8 IPG strips.



**Bio-Rad
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