



Biosciences

Odyssey® Infrared Imaging System

A fundamental change in western blot analysis



Accurate Quantification

- Wide linear dynamic range

Multiplex Detection

- Normalization increases quantification accuracy

High Sensitivity

- Equal to or better than chemiluminescence

Direct Detection

- No film, darkroom or messy substrates

Clear Data

- No loss of weak bands due to overexposed bands
- Clear, sharp, reproducible bands without fuzziness or "blowout"

Wide Range of Applications

- Western blots, Coomassie® stained gels, cell-based assays, fluorescent gel-shift assays, tissue imaging, *in vivo* imaging and more

EXCLUSIVE TO
MANDEL

Odyssey® Fc Imaging System

Infrared fluorescent and chemiluminescent imaging in one system!



With newly patented FieldBrite™ technology!

- Acquires images over the full dynamic range every time
- No need to supercool camera to reduce background noise
- Even imaging over entire field of view
- Increased image acquisition time

	Odyssey	Odyssey Fc
Microtiter Plates	✓	–
Membranes	✓	✓
Gels	✓	✓
Protein Gels	✓	✓
Tissue Sections	✓	–
Whole Organs	✓	–
Small Animals	✓	–
Maximum Scan Area	25 x 25cm	10 x 12cm
Multiple Membranes	✓	–
Multiple Plates	✓	–
Resolution	21 – 337µm	125µm
700nm & 800nm	✓	✓
Chemiluminescent Detection	–	✓
Sensitivity	Similar	Similar
Dynamic Range	3 – 4 logs	> 6 logs

IRDye® Secondary Antibodies

Optimized for a wide variety of applications

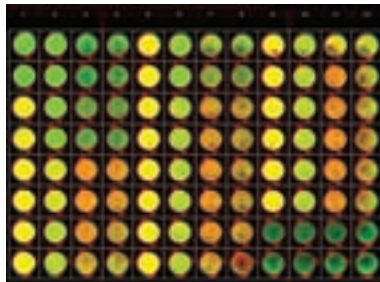
SPEND OVER \$1000 ON ANY LI-COR CONSUMABLES AND **SAVE 10%**



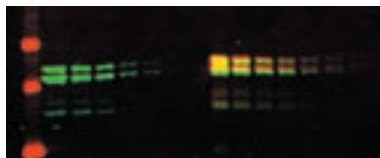
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IRDye infrared secondary antibodies are cross-adsorbed for multiplex detection and provide high specificity for any application. These antibody conjugates are optimized for high sensitivity and excellent signal-to-noise performance on LI-COR imaging systems, and outperform visible fluorescent dyes.



In-Cell Westerns



Western Blots

- Western Blots
- In-Cell Westerns
- On-Cell Westerns
- Protein Arrays
- Tissue Section Imaging
- *In vivo* Imaging
- In-Gel Westerns
- EMSA

DESCRIPTION	SIZE	CAT. NO.	PRICE
IRDye 800CW Goat Anti-Mouse IgG	0.5mg	LIC-926-32210	\$232.00
IRDye 800CW Goat Anti-Rabbit IgG	0.5mg	LIC-926-32211	232.00
IRDye 800CW Donkey Anti-Mouse IgG	0.5mg	LIC-926-32212	232.00
IRDye 800CW Donkey Anti-Rabbit IgG	0.5mg	LIC-926-32213	232.00
IRDye 800CW Donkey Anti-Goat IgG	0.5mg	LIC-926-32214	232.00
IRDye 800CW Donkey Anti-Chicken IgG	0.5mg	LIC-926-32218	232.00
IRDye 800CW Goat Anti-Rat IgG	0.5mg	LIC-926-32219	232.00
IRDye 680 Goat Anti-Mouse IgG	0.5mg	LIC-926-32220	232.00
IRDye 680 Goat Anti-Rabbit IgG	0.5mg	LIC-926-32221	232.00
IRDye 680 Donkey Anti-Mouse IgG	0.5mg	LIC-926-32222	232.00
IRDye 680 Donkey Anti-Rabbit IgG	0.5mg	LIC-926-32223	232.00
IRDye 680 Donkey Anti-Goat IgG	0.5mg	LIC-926-32224	232.00
IRDye 680 Donkey Anti-Chicken IgG	0.5mg	LIC-926-32228	232.00
IRDye 680 Goat Anti-Rat IgG	0.5mg	LIC-926-32229	232.00

IRDye® 680LT

New and improved brighter NIR dye

SPEND OVER \$1000 ON ANY LI-COR CONSUMABLES AND **SAVE 10%**



- Brighter and more photostable than other 700nm NIR dyes
- Specifically designed for optimal performance on the Odyssey system
- Applications include Quantitative Western, In-Cell Westerns, Protein Arrays and Microscopy

DESCRIPTION	SIZE	CAT. NO.	PRICE
IRDye 680LT Goat Anti-Mouse IgG	0.5mg	LIC-926-68020	\$191.00
IRDye 680LT Goat Anti-Rabbit IgG	0.5mg	LIC-926-68021	191.00
IRDye 680LT Donkey Anti-Mouse IgG	0.5mg	LIC-926-68022	191.00
IRDye 680LT Donkey Anti-Rabbit IgG	0.5mg	LIC-926-68023	191.00
IRDye 680LT Donkey Anti-Goat IgG	0.5mg	LIC-926-68024	191.00
IRDye 680LT Donkey Anti-Chicken IgG	0.5mg	LIC-926-68028	191.00
IRDye 680LT Goat Anti-Rat IgG	0.5mg	LIC-926-68029	191.00
IRDye 680LT Donkey Anti-Guinea Pig IgG	0.5mg	LIC-926-68030	191.00

IRDye® Conjugates, Streptavidin and Primary Antibodies

Optimized for a wide variety of applications

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DESCRIPTION	SIZE	CAT. NO.	PRICE
IRDye 800CW Streptavidin	0.5mg	LIC-926-32230	\$183.00
IRDye 680LT Streptavidin	0.5mg	LIC-926-68031	164.00
IRDye 680 Streptavidin	0.5mg	LIC-926-32231	183.00
HRP Goat Anti-Mouse IgG	1.2mg	LIC-926-34210	159.00
β-Actin Rabbit monoclonal antibody, 100µg/mL	100µL	LIC-926-42210	326.00
β-Tubulin Rabbit antibody, 100µg/mL	100µL	LIC-926-42211	326.00
Chemi-IR™ Detection Kit*, 20 blots	0.1mg	LIC-926-32234	128.00
Chemi-IR™ Detection Kit, 100 blots	0.5mg	LIC-926-32236	355.00

*Kit contents include: Chemi-IR Conjugate (IRDye 800CW Rabbit anti-HRP, lyophilized), Chemi-IR Diluent, Western Incubation Box, Large (11.8 x 8.9 x 2.9cm)

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Odyssey® Reagents and Markers

For quantitative westerns

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DESCRIPTION	SIZE	CAT. NO.	PRICE
Odyssey Blocking Buffer, 125mL	125mL	LIC-927-40100	\$55.00
Blocking Buffer, 500mL	1 bottle	LIC-927-40000	190.00
Blocking Buffer, 500mL, 3 pack	3 bottles	LIC-927-40003	509.00
Blocking Buffer, 500mL, 10 pack	10 bottles	LIC-927-40010	1,443.00
Bulk Buffer & PVDF Membrane Kit Ten bottles of blocking buffer and Millipore Immobilon-FL PVDF membrane [3.75m x 26.5cm]	10 Bottles + 1 Roll	LIC-829-31080	1,813.00
Blocking Buffer Sample Pack Includes: 1 X 125mL of Odyssey Blocking Buffer (LIC-927-40100); 1 X 100mL of Casein Blocking Buffer (LIC-927-40300) and 1 X 10X-20mL of Milk Blocking Buffer		LIC-927-40050	171.00
Casein Blocking Buffer, 500mL	500mL	LIC-927-40200	151.00
Casein Blocking Buffer, 100mL	100mL	LIC-927-40300	48.00
Protein Markers (MW – 10kD to 250kD) One-Colour Weight Markers fluoresce in the 700nm channel of the Odyssey Imaging System, with molecular weight shifts of 5% and minimal band broadening.	0.5mL	LIC-928-40000	212.00
Two Colour Protein Markers (MW – 10kD to 250kD) The Marker functions both as a prestained marker and as a fluorescent marker which is visible in the 700 and 800nm channels on the Odyssey® Infrared Imaging System.	250µL	LIC-928-40001	211.00

Membranes and Membrane Kits

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DESCRIPTION	CAT. NO.	PRICE
Odyssey Nitrocellulose Membranes (0.22µm, 7 x 8.5cm), pkg. 10	LIC-926-31090	\$74.00
Odyssey Nitrocellulose Membranes (0.22µm, 30cm x 3m), 1 roll	LIC-926-31092	270.00
Blocking Buffer and Membrane Kit: 1 bottle (500mL) Odyssey Blocking Buffer, 1 roll Millipore Immobilon FL PVDF Membrane (0.45µm, 26.5cm x 3.75m)	LIC-926-31098	546.00

Western Blot Incubation Boxes

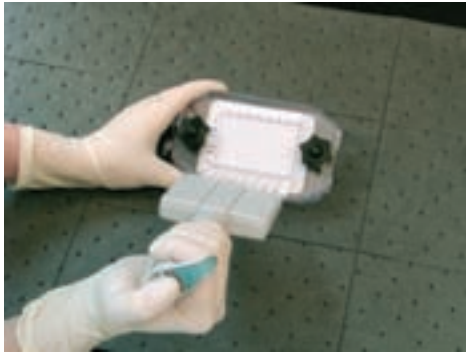
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DESCRIPTION	SIZE	CAT. NO.	PRICE
Small (7.3 x 5.1 x 3.0cm)	One box	LIC-929-97101	\$18.00
	Five pack	LIC-929-97105	57.00
	Ten pack	LIC-929-97110	89.00
Medium (8.9 x 6.6 x 2.9cm)	One box	LIC-929-97201	18.00
	Five pack	LIC-929-97205	57.00
	Ten pack	LIC-929-97210	89.00
Large (11.8 x 8.9 x 2.9cm)	One box	LIC-929-97301	24.00
	Five pack	LIC-929-97305	81.00
	Ten pack	LIC-929-97310	145.00
X-Large (15.2 x 10.2 x 3.2cm)	One box	LIC-929-97401	26.00
	Five pack	LIC-929-97405	98.00
	Ten pack	LIC-929-97410	169.00

MPX™ (Multiplexer) Blotting System

SPEND OVER \$1000 ON ANY LI-COR CONSUMABLES AND SAVE 10%

Screen multiple samples and targets on the same blot



- No cutting, stripping or cross-contamination
- Ideal for any multiple-target Western blot application
- Increases throughput, maximizes efficiency and reduces cost

MPX Blotting System includes:

- MPX unit, top and bottom
- Single and two lane combs
- MPX clamp nuts (2 packs: qty 2/pack)



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DESCRIPTION	CAT. NO.	PRICE
MPX Blotting System	LIC-921-00000	\$721.00

Western Blotting Kits

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Reagents and membranes for quantitative westerns

IRDye Western Kit I

- IRDye 800CW Goat Anti-Mouse Secondary Antibody (25µL, 1 mg/mL)
- IRDye 680 Goat Anti-Rabbit Secondary Antibody (25µL, 1 mg/mL)
- 500mL Odyssey Blocking Buffer
- 10 Millipore Immobilon™-FL PVDF Membranes (0.45µm, 10 x 10cm)

IRDye Western Kit II

- IRDye 800CW Goat Anti-Rabbit Secondary Antibody (25µL, 1 mg/mL)
- IRDye 680 Goat Anti-Mouse Secondary Antibody (25µL, 1 mg/mL)
- 500mL Odyssey Blocking Buffer
- 10 Millipore Immobilon-FL PVDF Membranes (0.45µm, 10 x 10cm)

DESCRIPTION	CAT. NO.	PRICE
Western Blotting Kit I	LIC-926-31050	\$399.00
Western Blotting Kit II	LIC-926-31052	399.00

In-Cell Western™ Assay Kits

SPEND OVER \$1000 ON ANY LI-COR CONSUMABLES AND SAVE 10%

NIR fluorescence detection and quantification of proteins in fixed cells

- Proteins in fixed, cultured cells are detected directly in microplates
- Eliminates typical Western blotting steps such as cell lysate preparation, electrophoresis and transfer
- Sapphire700™ Stain is a non-specific cell stain that accumulates in both the nucleus and cytoplasm of fixed or dead cells, but not live cells
- Kits contain reagents for up to twenty 96-well plates or ten 384-well plates

IRDye In-Cell Western Kit I

- IRDye 800CW Goat Anti-Mouse Secondary Antibody (0.5mg)
- DRAQ5™ (100µL) (Biostatus, Ltd.)
- Odyssey Blocking Buffer (4 x 500mL)
- Sapphire700™ Stain (100µL)

IRDye In-Cell Western Kit II

- IRDye 800CW Goat Anti-Rabbit Secondary Antibody (0.5mg)
- DRAQ5™ (100µL) (Biostatus, Ltd.)
- Odyssey Blocking Buffer (4 x 500mL)
- Sapphire700™ Stain (100µL)

DESCRIPTION	CAT. NO.	PRICE
In-Cell Western Kit I	LIC-926-31070	\$863.00
In-Cell Western Kit II	LIC-926-31072	863.00
Sapphire700 Stain (100µL)	LIC-928-40022	130.00



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Pearl® Impulse Imager

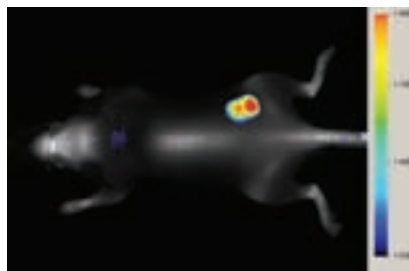
Near-Infrared *in vivo* imaging system



With the Pearl Impulse, you can:

- Visualize imaging agents dynamically with real-time imaging
- Use native cells and cell lines for *in vivo* imaging without reporter genes
- Achieve exceptional sensitivity and deep target imaging with laser excitation and near-infrared fluorescent detection
- Detect two near-infrared probes simultaneously
- Acquire optimized images quickly with one-button operation
- Use validated targeting agents to get started immediately without developing your own agents

Dual channel detection:
In the 800nm channel, IRDye 800CW 2-DG Optical Probe was used for tumor detection and is represented in pseudocolour. IRDye 680 BoneTag™ was used to visualize skeletal structures in the 700nm channel (grayscale), aiding in anatomical localization of the tumor.



Optical Agent Guide

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		IRDye800CW EGF LIC-926-08446	IRDye800CW RGD LIC-926-09889	IRDye800CW 2-DG LIC-926-08946	IRDye800CW PEG LIC-926-50401	IRDye800CW BoneTag LIC-926-09375	IRDye680 BoneTag LIC-926-09376	CellVue Burgundy LIC-926-90010	CellVue NIR815 LIC-929-90020
BINDING MECHANISM	Receptor	✓	✓						
	Transporter			✓					
	Calcium Chelating					✓	✓		
	Membrane Binding							✓	✓
	Non-Binding Contrast Agent				✓				
APPLICATIONS	Tumor Imaging	✓	✓	✓	✓				
	Metabolic Imaging			✓					
	Inflammation/Arthritis		✓	✓					
	Vasculature (Contrast)				✓				
	Lymphatic Imaging				✓				
	Lymph Node Imaging				✓				
	Structural Imaging					✓	✓		
	Cell Trafficking							✓	✓
FLUORESCENT DYE INFO	Excitation Maxima	779	776	774	778	780	680	683	786
	Emission Maxima	795	792	791	806	795	705	707	814
	Notes	For use with cells that overexpress EGFR	For use with cells that overexpress α _v β ₃ integrin receptors	For use with cells with increased glycolysis	Non-binding agent for vascular, lymphatic and general tumor	Bone binding agent for structural imaging	Bone binding agent for structural imaging	Cell Stain	Cell Stain
PRICE	\$428.00	\$444.00	\$428.00	\$444.00	\$428.00	\$428.00	\$267.00	\$267.00	

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4300 DNA Analysis System

Accelerate your research
and improve data quality

Microsatellites

- Completely automated from electrophoresis through allele scoring
- Unique allele "fingerprinting" software for highest scoring accuracy
- Accurately analyzes di-nucleotide repeats
- High through-put on 96-lane reloadable (3x) gels

Long Read DNA Sequencing

- 1000 – 1200 bases per sample
- 99% accuracy at 1000 bases
- Affordable to purchase and operate
- On-board starter software for DNA sequencing, or comprehensive e-Seq autosequencing software for Windows®

AFLP® Analysis

- Optimized IRDye AFLP and AFLP expression kits
- Automated electrophoresis, band scoring, and binning alleles
- True gel images for accurate analysis and editing
- 192 lanes per run on reloadable gels

Reverse Genetics – TILLING®

- Observe partial loss of gene function in addition to knockouts
- High sensitivity and low background make it easy to detect mutation bands
- Two-colour imaging eliminates false positive mutation identifications
- Screen up to 2 million bp per day

SNP Discovery and Haplotyping – Ecotilling

- Screen up to 2300 samples or over 2 million bp per day
- Applicable to any organism
- Applications include mapping, association analysis, mutational profiling, and biodiversity
- Two-colour imaging eliminates false positives
- Costs a fraction of conventional re-sequencing approaches
- Rapid haplotyping – SNP discovery and haplotyping in a single step

KB^{Plus} Gel Reagents

Optimized for LI-COR DNA Analyzers

DESCRIPTION	CAT. NO.	PRICE
KBPlus 3.7% Gel Matrix (500ml)	LIC-827-05214	\$145.00
KBPlus 5.5% Gel Matrix (500ml)	LIC-827-05215	145.00
KBPlus 6.5% Gel Matrix (500ml)	LIC-827-05607	145.00
KBPlus 10X TBE Buffer "Dry Pack": KBPlus 10X TBE Buffer, Dry Pack (Enough for 1L 10X TBE Buffer)	LIC-826-05213	43.00
KBPlus 3.7% Combo Pack (1x bottle gel matrix and one 10X TBE buffer pack)	LIC-827-05667	159.00
KBPlus 5.5% Combo Pack (1x bottle gel matrix and one 10X TBE buffer pack)	LIC-827-05668	159.00
KBPlus 6.5% Combo Pack (1x bottle gel matrix and two 10X TBE buffer packs)	LIC-827-05669	174.00
Gel Reagents, Long Read (Includes TEMED and bind silane)	LIC-9942-156	445.00
Gel Reagents, Standard Read (Includes TEMED and bind silane)	LIC-9942-157	445.00
Gel Reagents, Genotyping (Includes TEMED and bind silane)	LIC-9942-158	445.00
TE Buffer (1mL)	LIC-829-03877	9.00
dNTP with C7dGTP (2mM, 200µL)	LIC-829-04460	277.00

Stop Solutions

For DNA Sequencing, Genotyping
and AFLP Reactions

DESCRIPTION	CAT. NO.	PRICE
IR2 Stop Solution Red (200mL)	LIC-830-05043	\$754.00
IR2 Stop Solution Red (4mL)	LIC-830-04997	87.00
Blue Stop Solution (200mL)	LIC-830-05630	754.00
Blue Stop Solution (4mL)	LIC-830-05629	87.00

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Sizing Standards

DESCRIPTION	CAT. NO.	PRICE
IRDye800, 50 - 350 bp (125 lanes)	LIC-4000-44B	\$145.00
IRDye800, 50 - 700 bp (125 lanes)	LIC-4000-45	145.00
IRDye700, 50 - 350 bp (125 lanes)	LIC-4200-44	145.00
IRDye700, 50 - 700 bp (125 lanes)	LIC-4200-60	145.00
IRDye800, 50 - 350 bp (500 lanes)	LIC-829-06158	364.00
IRDye700, 50 - 350 bp (500 lanes)	LIC-829-06157	364.00