

# LabChip | Protein Assay Portfolio

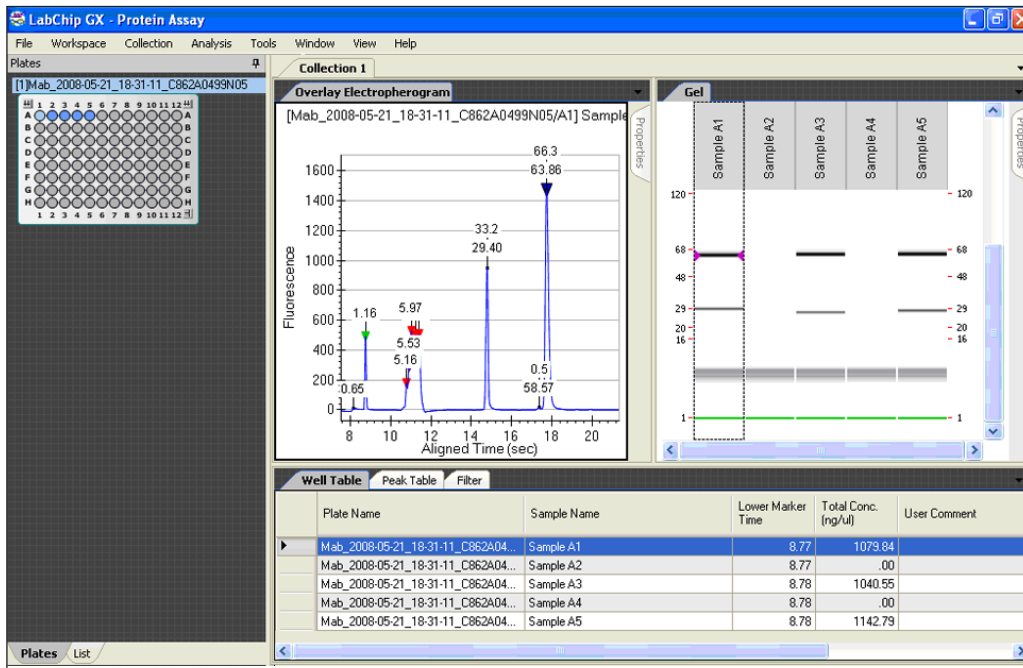
## Automated Protein Sizing and Quantification

Each assay provides a fast and easy way to analyze protein samples. Choose Protein Express for samples ranging in size from 14 to 200 kDa, Low Molecular Weight for samples from 5 to 80 kDa, and Pico for samples with very low concentration. Performing sample analysis with the LabChip protein assays saves time and money by automating sample loading, staining, destaining, and quantification.

The LabChip GXII Electrophoresis System uses a single sipper microfluidic chip to aspirate protein samples directly from 96- or 384-well plates. The microfluidics chip technology automatically stains, destains, electrophoretically separates, and analyzes the protein samples. The instrument optics detect the laser-induced fluorescent signal. System software automatically analyzes the data and provides the user with relative protein concentration, molecular size, and percent purity using ladder and marker calibration standards. Digital data results are immediately available for review or reporting in virtual gel, electropherogram graph, or table summary form.

### Features

- Save Time! – High throughput provides complete automated analysis of proteins in about 40 seconds.
- Save Money! – Automated analysis procedure provides significant cost savings relative to the materials and labor required to run manual gels for protein analysis.
- Automated exporting of results compatible with commercially available data management software such as Waters Empower®.
- Digital format facilitates review, export, and archiving of data.
- Extended Workflow profile allows chip to be loaded once for support of sample processing anytime within an 8 hour window.
- Flexible data display options - Results shown in your choice of virtual gel, electropherogram graph or tabular formats.
- RFID signature confirms compatibility of chip and assay selection.



The figure above shows the graphics user interface for the LabChip GX software. Results can be displayed and exported as virtual gels, electropherograms, or data tables. The LabChip GX software reports relative concentration, size, and percent purity of proteins.

### Specifications for Labchip GXII Protein Kits

Assay Kit	HT Protein Express		HT Pico Protein		Ht Low Molecular Weight Protein	
<b>Assay Script</b>	P100 Assay:	P200 Assay:				
<b>Sizing Range</b>	14 kDa – 100 kDa		14 kDa – 200 kDa		5 kDa – 80 kDa	
<b>Sizing Accuracy</b>	± 20%		± 20%		± 20%	
					± 10% (CAII, BLG)	
<b>Sizing Resolution</b>	± 10% difference in molecular weight		± 10% difference in molecular weight		14-80 kDa	± 10%
					< 14 kDa	± 20%
<b>Linear Dynamic Range</b>	5.0 – 2000 ng/µL		antibodies	50pg/ul -500 ng/ul (4 logs)	30 - 2000ng/µL (BLG, CAII in PBS)	
			other protein	10pg/ul - 100 ng/ul (4 logs)		
<b>Maximum Total Protein Concentration</b>	10 mg/mL				10mg/ml	
<b>Sensitivity</b>	5 ng/µL		0.1 % of total protein		4ng/µL CAII (8ng/µL BSA) in PBS	
<b>Quantitation Reproducibility</b>	30% CV up to 120 kDa				30% CV up to 120 kDa	
<b>Maximum Salt Concentration</b>	1M NaCl at pH 6.5 to 8.5				0.5M Total Salt	
<b>Chip Primes per Reagent Kit</b>	4		4		4	
<b>Chip Sample Lifetime</b>	400		400		400	
<b>Sample Analysis Time</b>	34 sec	41 sec	41 sec*		60 sec	

### Ordering Information:

Protein Express LabChip (Chip Only)	P/N 760499
Protein Express Reagent Kit	P/N 760328
Pico Protein Reagent Kit	P/N 760498
Bulk Protein Express Sample Buffer	P/N 760283
Bulk Pico Protein Sample Buffer	P/N 760414
Low Molecular Weight Assay	
High Resolution Protein LabChip (Chip Only)	P/N 760524
Low Molecular Weight Reagent Kit	P/N 760573

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