

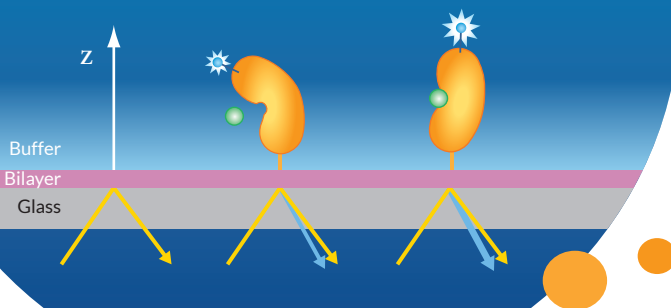
The Biodesy[®] Delta System

**Conformational Change:
Measure What Matters**



The Biodesy Delta measures conformational change at high throughput. It enables drug discovery for a wide range of molecular targets, regardless of mass or structure, and their interactions with a wide range of analytes, including fragments, small molecules, antibodies and other proteins.

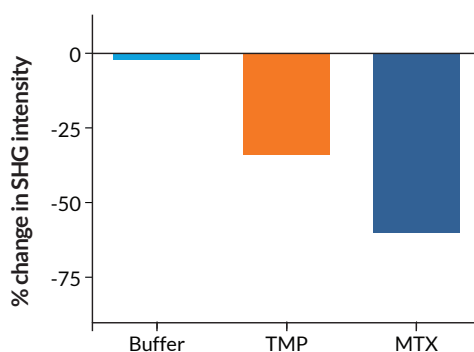
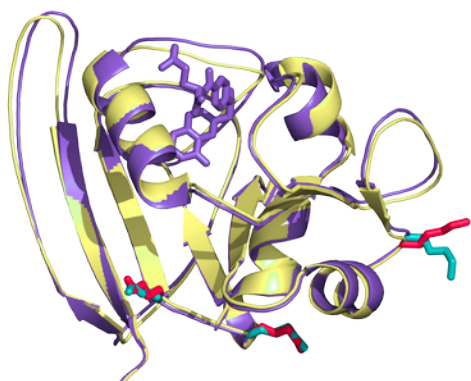
The Biodesy Delta employs Second Harmonic Generation (SHG) technology to measure analyte-induced conformational change at high throughput. Different changes in conformation produce differentiated SHG signals.



Applications

- **Primary and secondary screening**
Identify and differentiate hits including allosteric and conformation-specific modulators
- **Structure-activity relationship studies**
Integrate understanding of structural and functional change
- **Mechanism of action studies**
Identify order and mechanism of binding
- **Characterization of molecular interactions**
Study protein-ligand, protein-protein, protein-RNA/DNA, etc.

Conformational Signatures: Distinguishing Compounds upon Binding



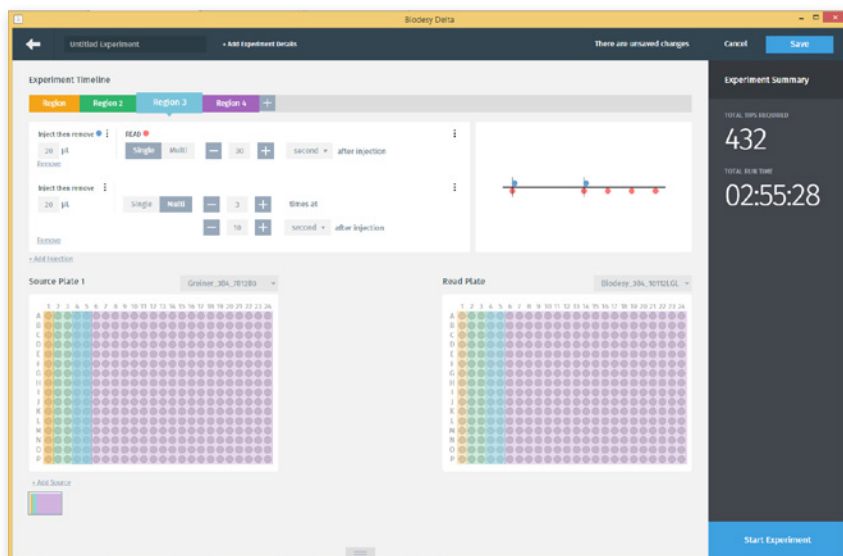
Overlap of apo- and MTX-bound DHFR crystal structures (yellow and purple, respectively). The cyan and red residues are the labeled lysine sites. SHG can distinguish compounds based on conformation specific binding.

Biodesy Delta Key Features

- Uniquely measure and differentiate protein conformational change in real time
- High throughput: 384-well plate format enables thousands of measurements per day
- Easy to use: automated, walk-away assay and intuitive software for easy experimental setup and operation

Delta Software

- Intuitive interface to quickly program both basic and complex experiments
- Ability to save protocols for commonly-run experiments
- Straightforward data presentation for rapid visual analysis
- Data export to common file formats



Delta Plates and Reagents

- Proprietary 384-well plate with integrated optical coupling
- Your choice of Ni-NTA, Avidin, or Phosphatidylserine bilayer surfaces feature specialized lipids to preserve protein function and provide convenient surface attachment for His-tagged, biotinylated, or membrane-associated targets.
- SH-active dyes available in both amine-reactive (lysine) and thiol-reactive (cysteine) forms





For more information on the Delta system and its applications, visit biodesy.com, or contact Biodesy at 650.871.8716

System Specifications

Assay Specifications

Real-time	✓
Throughput/day	1,000+
Native protein environment	✓
Functional readout	✓
HTS-compatible	✓
No restriction on protein size	✓
Protein consumption	< 1 µg
Plate compatibility	384-well
Supports multi-ligand/protein systems	✓
Compound affinity range	nM–mM
Dispense volume range	0–70 µL

Physical Specifications

Dimensions (WxHxD, cm)	142x193x83
Weight (kg)	480
Electrical Requirements	110–220 V
Safety	CE
Operating Environments	15–25 °C
Laser	Class 1 Laser Product with Embedded Class 4 Source



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