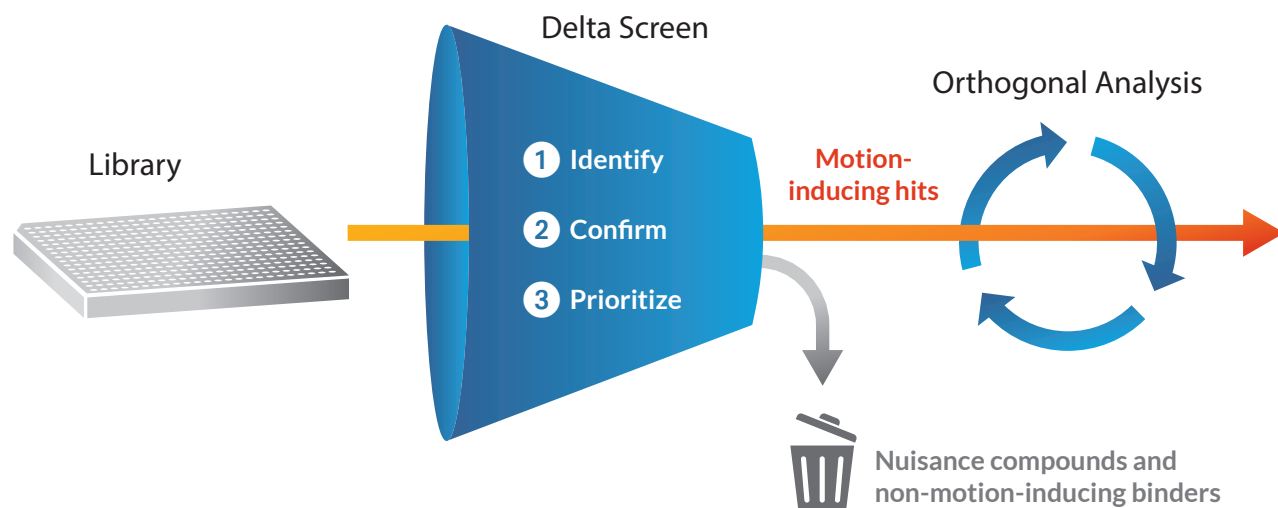


Structural Insight in Seconds

Screen for what matters. The Biodesy® Delta provides valuable structural insight early in the screening process by measuring over 20,000 conformational changes per week using just picomoles of target per well. Delta performs primary screens of fragment and diversity/target-oriented libraries or secondary screens immediately downstream of HTS, delivering high-value conformation-changing hits for orthogonal biophysical analysis, accelerating discovery-to-market timelines.

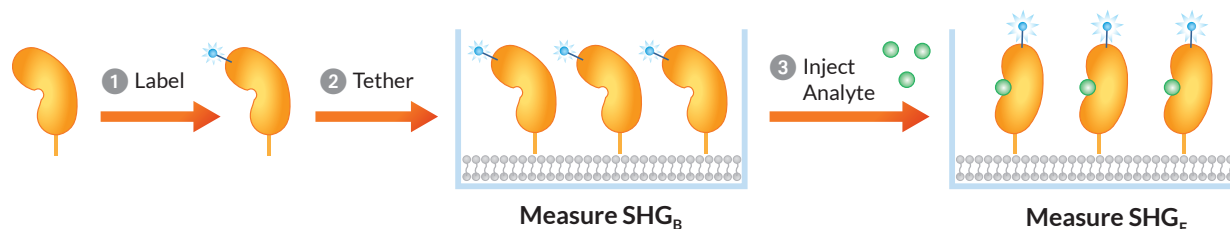


Biodesy Delta Screening Workflow

- 1. Hit Identification:** hits that induce target conformational change are identified by screening the library at one concentration.
- 2. Hit Confirmation:** hits are confirmed in a repeat experiment utilizing freshly prepared analyte.
- 3. Hit Prioritization:** Confirmed hits are then clustered and prioritized based on potency and conformational signature, revealed by concentration response, time course, competition, and washout experiments.

Library screening with the Biodesy Delta is performed using an assay developed to resolve the molecular motions you are looking for. Only those hits that induce target conformational response are prioritized for downstream analysis with orthogonal tools, conserving your time and resources.

The Delta Assay



Delta assays involve three simple steps:

- 1. Label** target on cysteines, lysines, or amine-modified oligonucleotides using Biodesy's orientation-sensitive SHG-active dye.
- 2. Tether** the SHG-labeled target to the lipid bilayer coating the bottom of 384-well plates.
- 3. Measure** SHG intensity before (baseline, SHG_B) and after (final, SHG_F) injection of analyte.

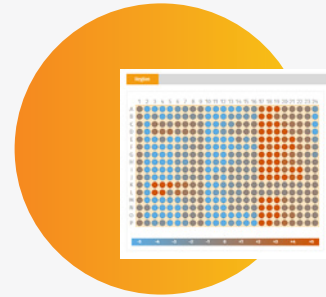
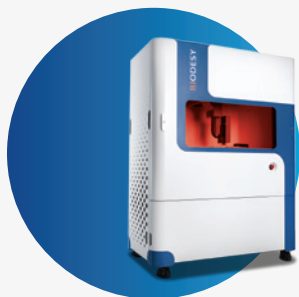
Conformational change is calculated as follows:

$$\Delta SHG (\%) = 100\% \times (SHG_F - SHG_B) / SHG_B$$

Assays can be developed to discriminate hits by mechanism (allosteric vs. orthosteric) and function (agonist vs antagonist) and are performed by on-board liquid handling robotics.

Biodesy Delta System

CONFORMATION CHANGES EVERYTHING



Structural insight in seconds

- Designed for your screening, follow-up and SAR workflow
- Cluster analytes based on potency, mechanism and function
- All-in-one assay kits include plates, lipid bilayer surface, SHG-active dye, and tips
- Intuitive software and integrated robotics for simple experimental setup and walk-away operation

Biodesy

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