

High-Throughput Screening Services

High-throughput screening (HTS) is widely used in the field of pharmaceuticals, biotech, and academic institutes for drug discovery, target validation and the identification of genes or proteins that modulate a particular biological pathway.

HTS utilizes robotics, liquid handlers, data processing, considerable software, and sensitive detection systems to quickly identify active compounds that modulate particular targets, pathways, or biochemical/cellular events. The output from an HTS campaign provides the basis upon which drug design and processing are used to generate lead compounds with appropriate physicochemical properties for therapeutic indications.

Our world-class HTS capabilities include compound and sample management, conventional and next-generation HTS and access to state-of-the-art equipment, readout instruments, and informatics. We are highly flexible from compound library screening for drug discovery to target identification and validation and work closely with you during assay design and data analysis. So you can get the most out of your data.

Available Services Provided by Creative Bioarray

- Assay development and validation
- Biophysical, biochemical, and cell-based assays
- Accurately determine the inhibitory potency of each compound and rank hits by affinity
- Assays validated with known inhibitors
- In-house ~ 600,000 compound library available for screening
- Customer-provided or third-party compound libraries can also be used
- All standard assay optical readouts
- Adaptable to most known targets

Readout Capabilities

- UV-VIS absorbance
- Luminescence: Reporter genes, ELISA
- Fluorescence: GFP, FLINT, FI, FP, FRET, TR-FRET, HTRF, DELFIA, LANCE, ELISA
- Radio-Isotope: Receptor assays (ligand-binding/competition), SPA, metabolic enzymes

Targets for Our HTS Screening

- GPCRs
- Ion channels/Transporters
- PPI (protein-protein interaction)
- Enzymes
- Nuclear receptors

Special Features of Our HTS Services

- ▶ Comprehensive menu of more than 1,000 validated assays
- ▶ Capacity to screen more than 100,000 wells per day
- ▶ Identify potent and selective high-quality leads in a single screen
- ▶ Identify new target opportunities from existing chemical assets
- ▶ Flexible set-up, able to react to unforeseen chemistry
- ▶ Reliable, reproducible, and unbiased results
- ▶ Short turnaround time and competitive pricing