

Axxam High Throughput Screening

Boutique Service Industrial Quality Axxam has proven experience in High-Throughput Screening via a range of fully automated state-of-the-art screening stations for contract research services in hit finding programs. The platforms are designed to run biochemical and cell-based assays in 384 well format, using a variety of detection technologies including luminescence, fluorescence, absorbance, High Content Screening and radiometric readouts. Axxam has a remarkable track record and our clients range from large global pharma to small biotech. The access to our proprietary compound library AXX^{DIV2.0} and state of the art compound management facilities complete the extensive offering. Axxam has recently added radiometric and High content screening to its hit discovery services offering. These platforms are available through Hit Discovery Constance (HDC) GmbH a joint venture organisation between Axxam, Lead Discovery Center (LDC) and Centre for Drug Design and Discovery (CD3), based in Constance, Germany

HTS services offered

Assay adaptation to the specific screening format

- Pilot screening performed on a sub-set of the library
- Fully automated primary screening
- Data analysis for primary hit identification using Genedata Screener[®]
- Hit confirmation
- Activity Determination
- (EC₅₀ /IC₅₀ determination)
- Preliminary SAR analysis

 Orthogonal assays and tests on homologous targets

Cardiac safety profiling and liability screen



Hit Discovery Services





Automated High Throughput Screening

 Three fully automated HTS stations (average 50,000 test points/day/ station)

Luminescence, fluorescence and AlphaScreen[®]

- Homogeneous and nonhomogeneous assays
- 180 robust HTS grade functional cell based assays available
- Proprietary in-house screening technologies
- Full kinetic readout and scheduled protocols
- Dedicated data analysis team
- Screens run on client collections and/or Axxam AXX^{DIV2.0} library
- Experience with HTS campaigns of >1M compounds

Automated High Content Screening

 Fully integrated confocal HCS reader (Opera) and real time data analysis allowing automated high throughput HCS operation (50,000 test points/day)

- Live cell imaging
- Integrated nl dispenser
- Applications: Pathway,

translocation and phenotypic assays

Automated Radiometric Screening

CyBio centric screening station for SPA assays (60,000 test points/day) including Lumax Camera system

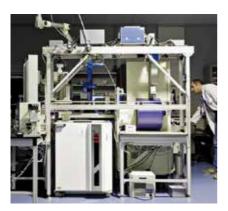
 Semiautomated screening with flashplates and filterplates (up to 30,000 test points /day)

Applications: binding assays, transporters, kinases, epigenetic assays

Subset	#Cmpds	Characteristics
Discovery	180,000	~10 analogues per scaffold to provide SAR information
Explorer	48,000	All singletons; suitable for exploring novel target space
Probe	12,000	Low MW; suitable as a starting point for further optimization

Axxam SpA (Italy), has developed a new compound library, AXX^{DIV2.0} for high throughput screening (HTS) applications.

Comprising 240,000 compounds, the library is characterized by a high level of diversity and novelty. AXX^{DIV2.0} was selected by our team of medicinal and computational chemists, and incorporates Axxam's extensive experience in HTS. Library compounds can be accessed either via contract HTS projects at Axxam or alternatively, selected subsets can be provided for screening at the client site.



Key Features

240,000 compounds, with 3 library subsets designed for specific screening needs

 Highly novel: each compound was no more than 3 years old at time of selection

 Compounds have been rigorously selected to exclude undesirable features

A 10mg supply of each compound is guaranteed by the provider

 Building blocks for all compounds available



AXX^{DIV2.0} Compound Library

Access to the Library

- SD files can be provided under CDA
- Custom selections are possible as screening-ready plates, transferred to the client. Several volumes and plating options available
- All rights to screening-derived information belong to the client
- Target can be screened at Axxam using either client's assay or Axxam's assay collection



Working with Axxam

Key Advantages

- Over 10 years experience providing HTS services and assay development
- Over 180 functional cell-based and 60 biochemical assays developed or adapted to HTS
- Broad target experience, with particular expertise in ion channels and GPCRs
- New assays can be developed on-demand
- Most suitable assay technology for each target is selected
- Access to our new 240,000 compound AXX^{DIV2.0} library



Director Business Development

Sabrina Corazza phone +39 02 2105634 sabrina.corazza.sc@axxam.com

Corporate Offices & Laboratories

Axxam S.p.A via Meucci 3 20091, Bresso (Milan, Italy) phone + 39 02 2105664 fax + 39 02 2105602 www.axxam.com



