FONDATION Maladies Rares

PARTNER PLATFORM
High Throughput Screening / Hit to lead

PCBIS

General information

Administrative information	
Structure	PCBIS UAR 3286 CNRS-Unistra
Address	300 Bld S Brant 67412 ILLKIRCH
Website	www.pcbis.fr
Manager	Dr Pascal VILLA
Contact	pvilla@unistra.fr
Date of implementation	1999

Labels / quality approach	
IBiSA	Yes since 2008
ISO 9001 certification	Yes since 2007
National networks	ChemBioFrance since 2018
International networks	None
NFX 50-900 certification	2014

Team	
Number of researchers	0
Number of engineers	20
Number of technicians	0
Number of administrative staff	3
Other	0

Main achievements	
Number of screenings performed since creation	200
Number of screenings performed per year	15-20
Fields of expertise / therapeutic areas	
Rare diseases; cancer; inflammation; pain; drug development; assay development	

Scientific Information

Chemical Library	
Description of the collection (number of chemical molecules, natural, royalty-free products, known synthesis methods, etc)	
Strasbourg collections: 8000 small compounds patent-free; 320 natural products; 480 extracts; 1520 Prestwick Chemicals library: 340 POM (Prestwick) French Chemical library: 50 000 compounds (access to 87000 compounds)	
Conditioning	96-384 well plates
Database (structure, accessibility conditions)	On demand; sdf
Member of the National Chemical Library	Yes

Targets
Targets for the screening service (e.g. protein targets, cell targets, etc.)
Soluble proteins (kinases, phosphatases, phosphodiesterases, calmoduline, nuclear proteins, membrane proteins (GPCRs); cellular models (>20 cell types)
Activities (e.g. cloning, protein expression, obtaining cell lines, management and storage of lines, cell culture, etc.)
Development of molecular & cellular assays; soluble & membrane protein expression; 230 clones of labeled GCPR; Tumoroids and organoids development

High throughput screening	
Number of measurements/days (approx.)	
Biological tests proposed (e.g. in vitro enzymatic tests, cell tests (binding tests, cell survival, image analysis, etc)	
Binding assays, enzymatic or cellular assays, cell survival, toxicity, release of soluble factors.	
Technologies / Equipment (robots, automats, etc.)	
Fluorescence, luminescence, FRET, BRET, HTRF, TR-FRET, fluorescence polarisation, alpha-screen ; alpha-LISA ; ELISA ; Fully automated screening PF with robots, readers; storage module; liquid dispenser ; cell incubator (www.pcbis.fr) in class 100 environment (PSM like). Several other pipetting robots + readers +DLS resder +in cell automated imager + cell fluorescence imager for HCS.	

Access	
Site teams	Yes, Fee for service, collaboration or direct use of apparatus after training
External academic teams	Yes, Fee for service, collaboration or direct use of apparatus after training
Private Outdoor Teams	Yes, Fee for service, collaboration or direct use of apparatus after training

Training courses offered
Training for screening and fluorescence; Contribution to every other year CNRS screening school Training of users on demand

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ADME

PCBIS

General information

Administrative information	
Structure	PCBIS UAR 3286 CNRS-Unistra
Address	300 Bld S Brant 67412 ILLKIRCH
Website	www.pcbis.fr
Manager	Dr Pascal VILLA pvilla@unistra.fr
Contact	Dr Patrick GIZZI patrick.gizzi@unistra.fr
Date of implementation	1999

Labels / quality approach	
IBiSA	Yes since 2008
ISO 9001 certification	Yes since 2007
National networks	ChemBioFrance since 2018
International networks	
NFX 50-900 certification	2014

Team	
Number of researchers	0
Number of engineers	5
Number of technicians	0
Number of administrative staff	3
Other	0

Main achievements	
Number of ADME performed since creation	791 achieved projects since 2009
Number of ADME performed per year	Currently 100 projects per year since 2020
Fields of expertise / therapeutic areas	
Service and consulting in ADME-Tox Physicochemistry Drug metabolism *In vivo* safety and pharmacokinetics Animal models for respiratory diseases	

Scientific Information

Study of the hit properties
Physicochemical profile
Solubility and lipophilicity measurements Acidity constants determination (pKa) Chemical stability studies
Properties of ADME – Toxicology
Permeability measurements on artificial and cell membranes (Caco-2) Plasma protein binding and blood partitioning measurements Plasma and metabolic stability studies (liver microsomes and hepatocytes) Metabolite identification Drug drug interactions studies (CYP induction and inhibition, UGT inhibition)
Pharmacokinetic behavior
Chronic and acute safety studies on rodents (mouse and rat) Pharmacokinetic studies : - Concentration-time profiles of drugs (Cmax, Tmax, t ½) - Available routes : Intravenous, intraperitoneal, intranasal, subcutaneous, oral gavage, - Bioavailability - Distribution in tissues
Technologies / Equipment (robots, automats, etc.)
High and low resolution mass spectrometers (Q-TOF and triple quadrupole) High performance liquid chromatographs (UV-vis) Liquid handlers

Access	
Site teams	Yes
External academic teams	Yes
Private Outdoor Teams	Yes

Training courses offered
Training on equipments and technologies Contribution to every other year CNRS screening school