

CELLULAR PHYSIOLOGY EQUIPMENTS AND SERVICES

EQUIPMENTS

Equipment	Manufacturer	Model	Self-service equipment	Equipment with technical support
Operetta cellular imager	PerkinElmer	Operetta	yes	yes
EnVision multilabel plate reader	PerkinElmer	2104	yes	yes
Nikon slide scanner	Nikon	LS 9000ED	yes	yes
High definition Aperio slide scanner	Aperio	ScanScope CS	yes	yes

SERVICES

Immunoassay & biochemical determinations.

Quantification of hormones, cytokines and peptides present in blood (plasma and serum) and in incubation media (e.g. insulin, c-peptide, glucagon, CRP, cortisol, TNF, leptin, Il- 6, etc.) by ELISA, TR-FRET and AlphaLISA. Immunoassays available for human and rodent samples. The platform can also, with its industrial partners, develop customized AlphaLISA and TR-FRET assays for new targets for the screening of molecules or the development of biomarkers.

Biochemical assays (triglycerides, fatty acids, glucose, fructose, cholesterol, creatinine, urea, etc.) in humans and rodents (miniaturized assays).

Immunohistochemistry & Morphometry. *Example: measurement of the mass of pancreatic beta and alpha cells and other tissues.*

Quantification of alpha and beta cell mass, cell proliferation (Ki-67 positive) of islets of Langerhans by immunohistochemistry as well as by morphometric measurements (dimensions of cells / tissues) using an Aperio high definition slide scanner (Leica). We also offer adipocyte morphometry. Other tissues are also available.

Operetta high content imaging system

Measurements of cellular activities by high-throughput fluorescence imaging (high content screening), using an Operetta cell imager. The service allows the quantification in 96/384-well plates of several cellular activities such as: apoptosis, cell proliferation, cell migration, intracellular protein translocations, mass and mitochondrial activities. Confocal or non-confocal mode available.