

BIOMANUFACTURING SERVICES



Structure
Activity Validation

A. AFFINITY SCREENING

IMPACT provides multi-parameter analyses on molecules or cells by using SPR (Surface Plasmon Resonance) imaging:

- affinity screening of purified proteins or cell receptors
- innovative selection of antibodies, protein leads, etc.
- preparation of biochips with specific antibodies or antigens (tailor-made bioarrays)

IMPACT optimizes your production (USP) or purification (DSP) processes by using BIACORE or Microcalorimetry:

- strengthening the batch reproducibility of your biomanufacturing process

Process	Technology	Data
Lead Selection	Platform specialized in the multiparameter & multiplex analysis by using SPRI	
Process development	High-Throughput Screening (HTS) for process optimization by using BIACORE	
Affinity characterization	Affinity & Kinetics Parameters	

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R&D –
Process development

Production

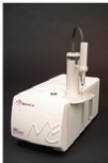




Purification

Quality Control

Affinity Screening Services

B. STRUCTURE ACTIVITY VALIDATION

- ❖ IMPACT monitors biological activities during the biomanufacturing process by using SPR imaging, microcalorimetry, spectroscopy CD/LS analyses, etc.
- ❖ IMPACT analyzes signaling pathway, reporter genes, second messengers, calcium flows, purification processes, etc. by using proprietary- or commercially-available BRET or HTRF technologies.

Process	Parameter	Technology	Data
USP →	Affinity	 ITC 200 Microcalorimeter	 Integration of heats to extract affinity (KD), stoichiometry (n), enthalpy (ΔH), entropy (ΔS)
	→ Affinity		 Integration of heats to determine protein activity
DSP ↘	Structure stability	Spectropolarimeter 810 Circular Dichroism (CD)	 
QC →	Functional activity	BRET HTRF	