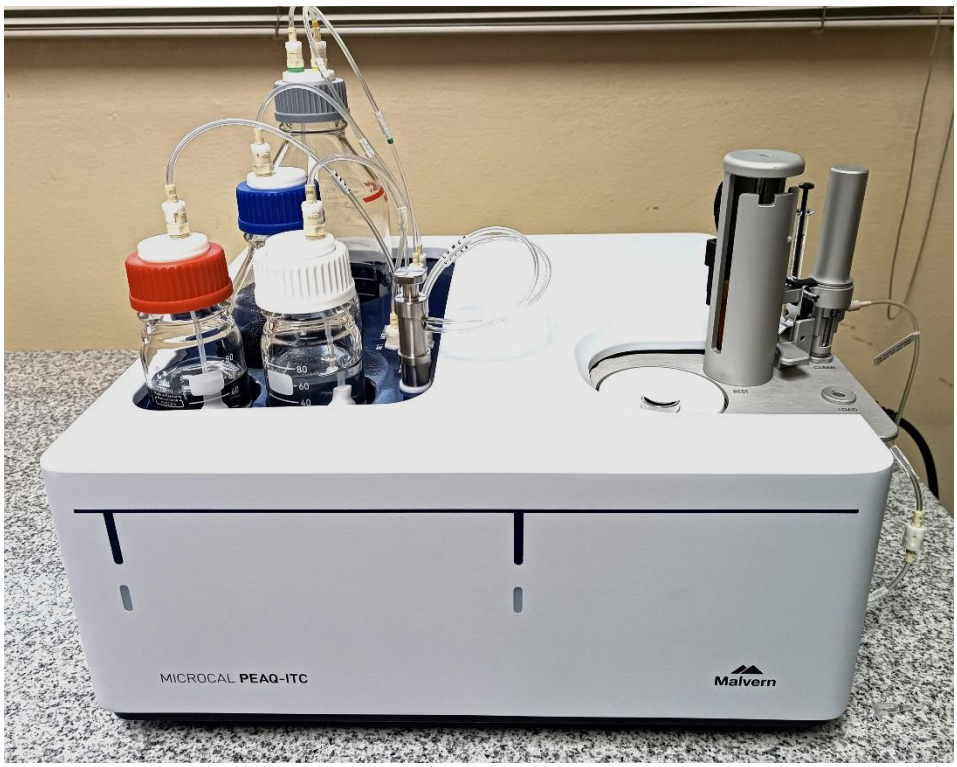
MicroCal ITC (Isothermal Titration Calorimeters)



Band: Malvern

Model: MicroCal PEAQ-ITC

Custodian: Mr.Sirichai Kositarat

Location: K652, 6th Floor, Chaloemprakiet Building, Phyathai Campus

Description and Specification:

Measurement type	Affinity (K_D)
Measurement type	Enthalpy ΔH
Measurement type	Entropy ΔS
Measurement type	Stoichiometry (n)
Sample volume	280 µL
Cell volume	200 µL
Injection syringe volume	40 µL
Injection volume precision	< 1% @ 2 µL
Sample throughput	0-12 per 8 h day
Cell material	Hastelloy
Cell	Coin-shaped
Noise	0.15 ncal/s
Temperature range	2°C to 80°C
Temperature stability	± 0.00012°C
Response time	8 s*

Multiple feedback modes	Yes (passive, high gain, low gain)
Notes	*The MicroCal PEAQ-ITC Instrument Response Time is a true time constant. It is the time interval between the first deviation away from the baseline, and the point on the peak that is 63% of the maximum peak height.
More Information	

Applications

Used widely in the life sciences and drug discovery with key applications in:

Characterizing biomolecular interactions, to:

- Confirm binding and activity
- Determine stoichiometry and thermodynamic parameters
- Study structure activity relationships

Studying the interaction of any two biomolecules including:

- Proteins, nucleic acids, lipids, drugs and inhibitors

Drug discovery for:

- Hit validation and characterization
- Lead optimization
- Mechanism of action