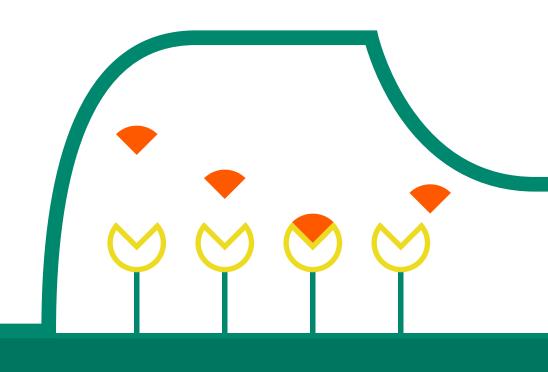


Surface plasmon resonance

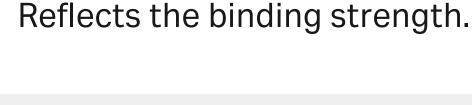
(SPR)

Visualize your research



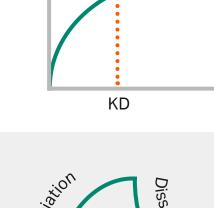
using SPR label-free technology

View molecular interactions in real-time



Affinity

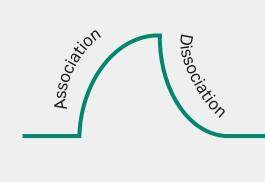
Kinetics



RU

and dissociates.

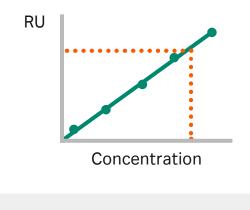
How fast/slow a complex forms



Determine concentration of active analyte.

Specificity

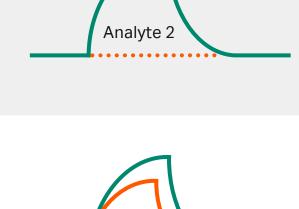
Concentration



Analyte 1

Comparability

Is the molecule specific for its target?



In real-time.

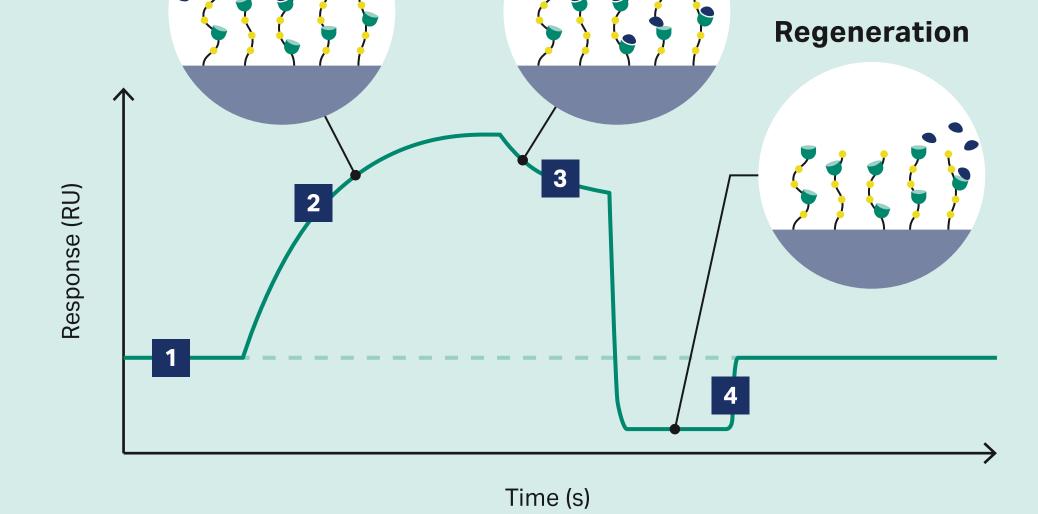
Ligand — analyte binding.

Similar to reference product?



Ligand is attached to sensor surface. Buffer flows over the surface to establish baseline. Analyte in solution is injected. Binds to ligand to form a complex. Analyte injection ends. Complex starts to dissociate from ligand.

- The surface is regenerated and sensorgram returns to baseline. Next analyte can be measured.
- **Dissociation Association**



Green sensorgram shows rapid kinetics: frequent administration of low dose to

100

80

60

40

occupies the target for a long time.

Orange sensorgram illustrates slower

kinetics: administration of a high dose

Affinity ≠ kinetics

Robust results from

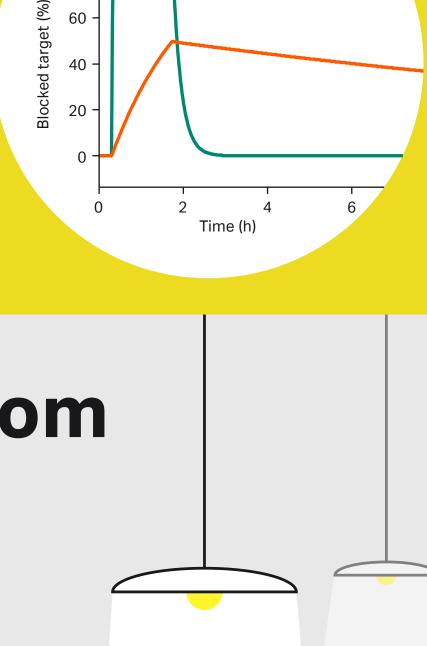
occupy the target.

difficult samples

Measures even weakly-binding molecules

No label/reporter molecules

Analyze biological samples



Low sample and reagent volumes Fast temperature equilibration Multiplexing capability Reuse sensor chip surface •••

• • •

Compounds

and

fragments

50 Da

10

9

Pure or complex. Small or large.

Proteins

and

enzymes



Antibody

fragments

150 kDa

Kinetic space

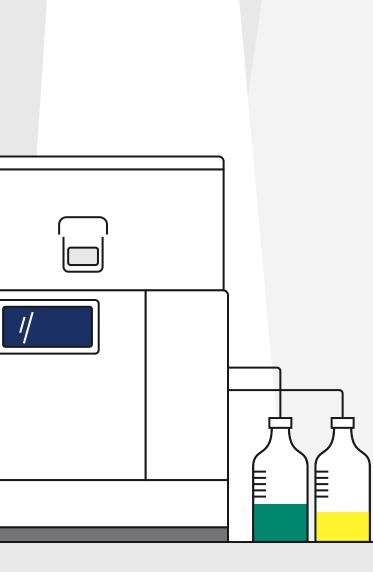
DNA/RNA



Antibodies



100 pM



Virus

~50 mDa

Cells

Interaction analysis with SPR for challenging samples including cell culture, serum, and plasma.

50 kDa

Measure a broad range (µM to pM) of on/off rates for molecules and samples. 0.07 811 0.7 FM 1091 MZ

Strong

binders -aster association Stronger arrinity 8 100 rM 7 Association: log (k_a) 6 100 HM 5 4 Slower dissociation 3 2 -2 -7 -6 -5 -3 -1 0 Dissociation: log (k_d) Choose SPR and BiacoreTM systems From research to drug discovery, development to QC. 60000

Satisfied

Recognized technology

Biacore™ systems are cited in

more than 60 000 publications.

Extremely satisfied **Ease of use**



Extensive support

Easy access to assay set-up tools

and our application scientists.

Innovation

Over 90% of survey responders

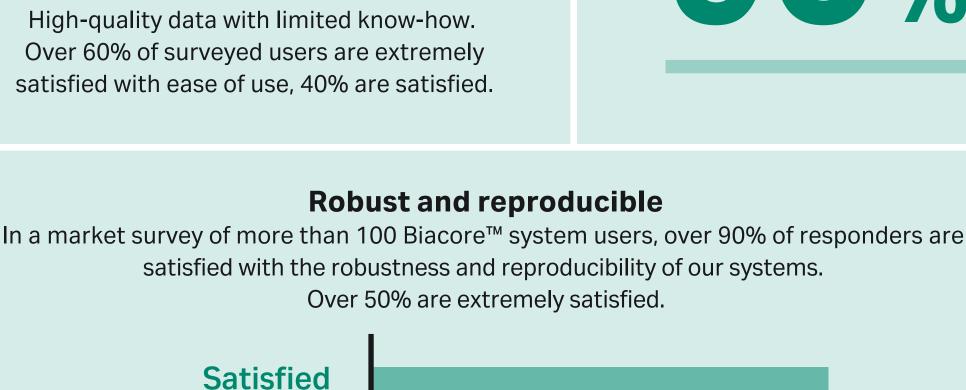
believe we have expertise and

provide innovative solutions in

the label-free interaction

analysis market.

100%



50%

cytiva.com

Extremely satisfied

More learning tools at cytiva.com/biacore

Source: Label-free interaction analysis (LFIA) instrument tracking study 2021, Cytiva.