

switchSENSE[®]

Multi-parameter biophysical analysis
of molecular interactions

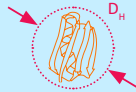
k_{ON} | k_{OFF} | K_D | IC_{50} | D_H | T_M | ΔG | ΔH | ΔS | k_{CAT} | K_M | U



	SPR Surface Plasmon Resonance	BLI Bilayer Interferometry	ITC Isothermal Titration Calorimetry	MST Microscale Thermophoresis	switchSENSE®
Measurement signal(s)	Refractive index	Refractive index	Heat	Thermophoresis	Fluorescence & Molecular Dynamics
Affinity	●	●	●	●	●
Kinetics	●	●	○	○	●
Thermodynamics	●	○	●	○	●
Protein diameter	○	○	○	○	●
Conformational changes	○	○	○	○	●
Melting temperature	○	○	○	○	●
Avidity and high affinity ($K_D < 10$ pM)	○	○	○	○	●
Dual-signal	○	○	○	○	●
Multi-ligand immobilization	○	○	○	○	●
Advanced ligand density and stoichiometry control	○	○	○	○	●
Kinetics of DNA-modifying enzymes	○	○	○	○	●

Unique measurement capabilities → **Highly relevant USPs**

STRUCTURE MEANS FUNCTION
To understand the mode of action of drugs it is necessary to analyze conformational changes in proteins.



USP switchSENSE® is the only biosensor capable of measuring protein shape (friction).

NEXT GEN ANTIBODIES FOR IMMUNOTHERAPY
Highly specific antibodies are the key to cancer immunotherapy. To this end, multi-specific antibodies are in development that can recognize cancer cells with targeted selectivity.

USP switchSENSE® is the only measurement technology enabling the researcher to characterize multi-specific formats regarding their selectivity to multiple targets.

switchSENSE® provides higher information content than any other technology for molecular interaction analysis

For further information and application examples, please visit our website www.dynamic-biosensors.com/switchsense/applications/