

Intermolecular Interaction Analysis

We introduced the latest SPR instrument, **Sierra SPR-24!!**



Bruker/ Sierra SPR-24 Pro

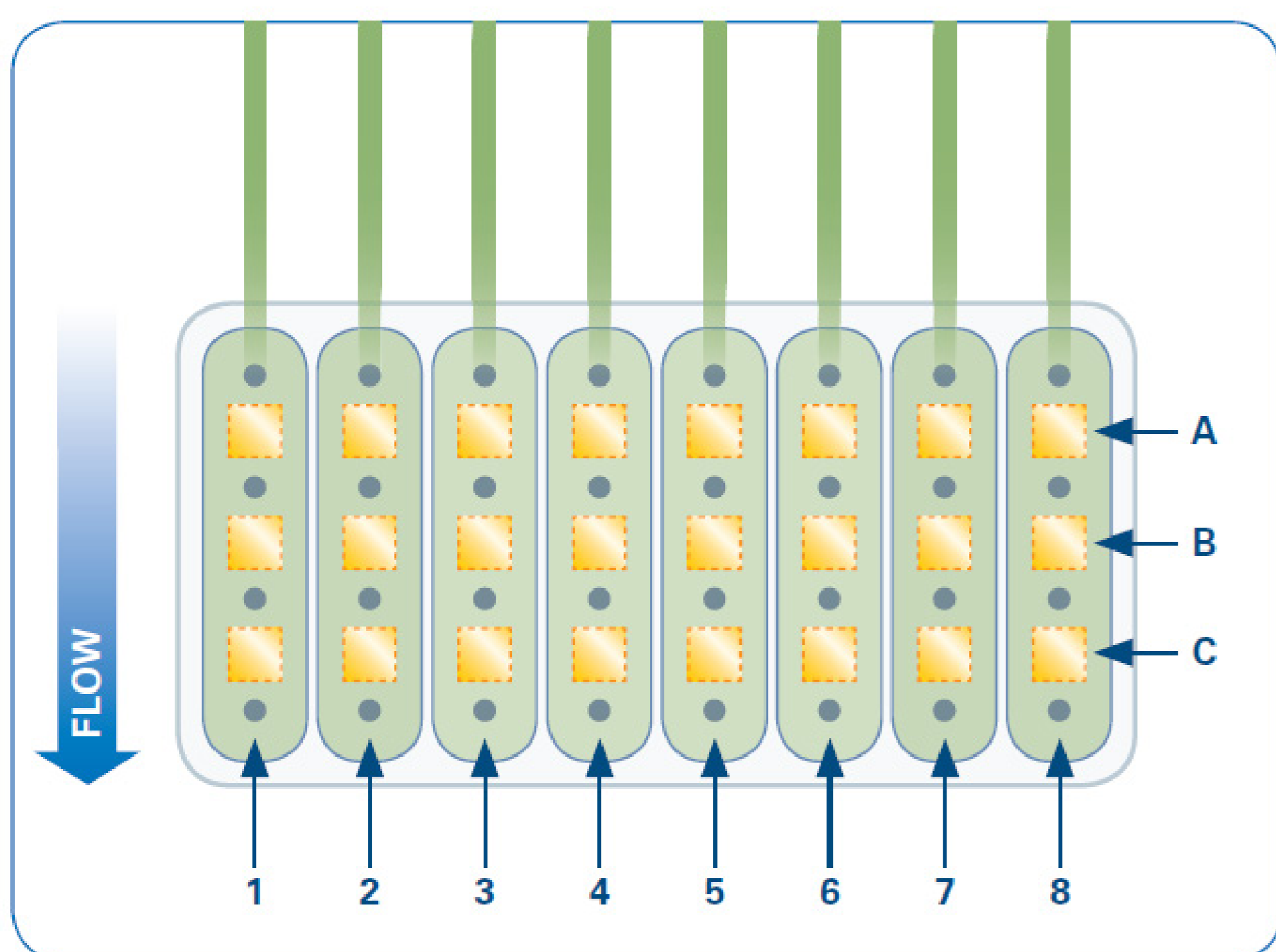
Sierra SPR-24 has industry leading SPR performance and supports various intermolecular interaction analyses including high-throughput screening and kinetics analysis.

- **High-throughput**
24 sensor spots (3 spots/channel x 8 channels)
Immobilization and sample injection can be conducted individually per spot.
Screening of 24 ligands by a single injection.
- **High-sensitivity**
Able to perform interaction analysis of small molecular compounds as fragments
Molecular-weight ≥ 100 Da

Analysis example utilized numerous sensor spots

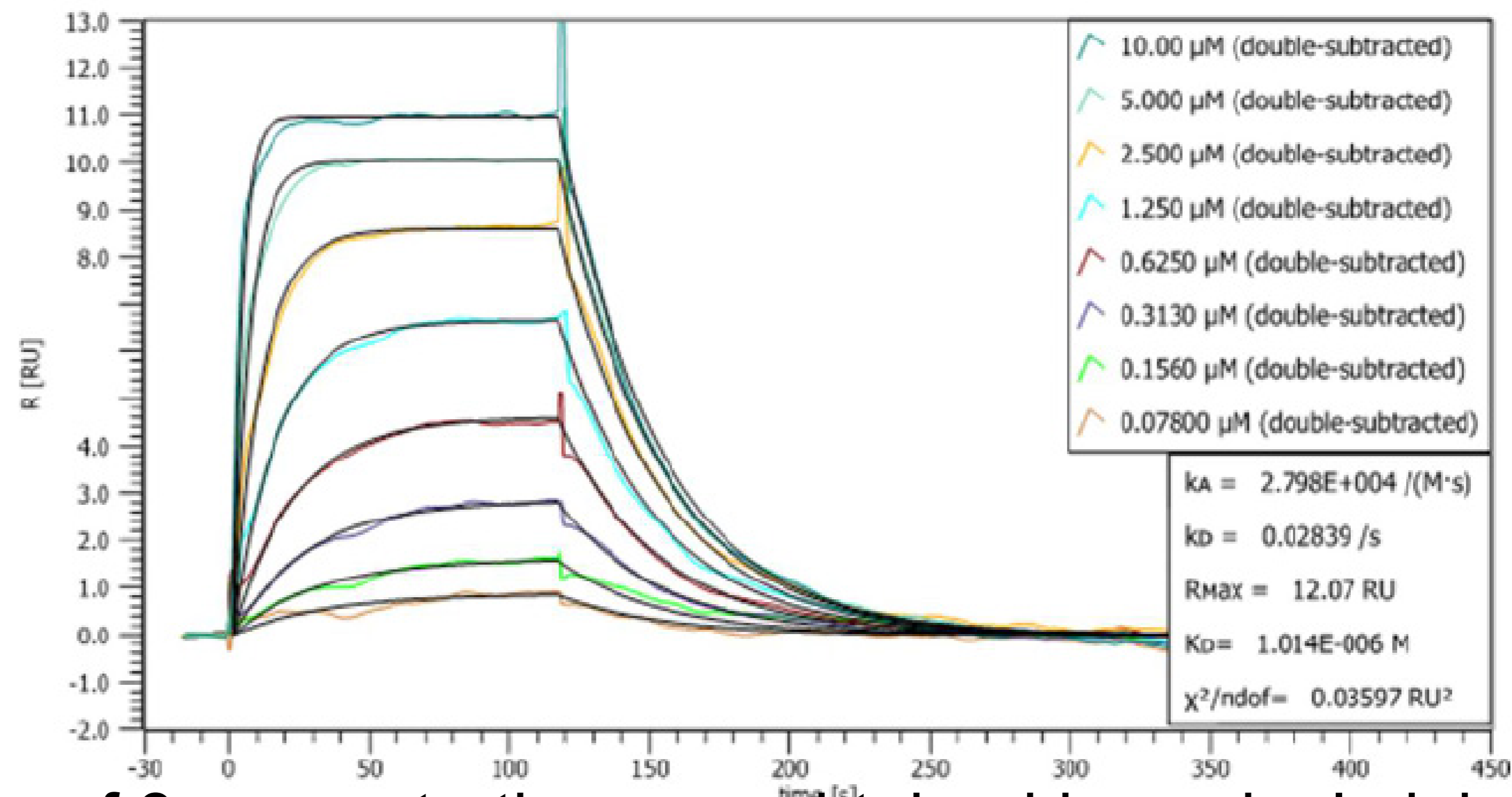
SICK (Single Injection Cycle Kinetics) method

A method realizes a speedy kinetics analysis by injecting analyte solutions of different concentrations to multiple sensor spots where the same ligands are immobilized.



In 1 to 8 of column A, ligands are immobilized, and analytes of different concentrations are injected at the same time.

Ligand : carbonic anhydrase II (30 kDa)
Analyte : small molecule inhibitor (201 Da)



- Data of 8 concentrations are obtained by a single injection for kinetics analysis
- Reproducibility between channels is high, and results equivalent to reference documents can be obtained.

Applicable to ligands that are hard to regenerate or easily inactivated.

Application

- Screening and kinetics analysis of small molecular compounds for target proteins
- Screening and characterization of biopharmaceuticals
- Various intermolecular interaction analyses of compounds, peptides, nucleic acids, proteins, and sugars
- Comprehensive intermolecular interaction analysis combined with other methods. ITC, NMR, MS, CD, and high-speed AMF

Please feel free to contact the following sales departments:

Toray Research Center, Inc.

Life Science Sales Dept.: +81-3-3245-5666
Kansai Sales Dept. (Life Science): +81-77-533-8689
E-mail: bunseki@trc.toray.co.jp