Published Papers

More fast and predictable using MSPR icluebio accompanies you on your long new drug & development journey.

Binding / Affinity / Rate constants (Kinetics)
In the library, find a candidate that binds to the target protein quickly and strongly,
Thermodynamics / Inhibition test / Epitope Mapping / Binning
Does the binding property change at the biological temperature
and which site of the target does the candidate substance bind to?
ADME test / Pharmacokinetics
In addition, pharmacokinetics can be predicted
through the evaluation of binding to major proteins in the blood before clinical trials



Publications

- Method for the rapid detection of SARS-CoV-2-neutralizing antibodies using a nanogel-based surface plasmon resonance biosensor, ACS Applied Polymer Materials, 5.3, 2023, 2195-2202
- Novel bispecific human antibody platform specifically targeting a fully open spike conformation potently neutralizes multiple SARS-CoV-2 variants, *Antiviral Research*, 212, 2023, 105576
- Development and Characterization of Phage-Display-Derived Novel Human Monoclonal Antibodies against the Receptor Binding Domain of SARS-CoV-2, *Biomedicines*, 10(12), 2022, 3174
- Homogeneous One-Step Immunoassay Based on Switching Peptides for Detection of the Influenza Virus, *Analytical Chemistry*, 94, 2022, 9627-9635
- One-step immunoassay for the detection of food poisoning related bacteria using a switching peptide, Analyst, 147, 2022, 5363.
- Covalently Immobilized Regenerable Immunoaffinity Layer with Orientation-Controlled Antibodies Based on Z-Domain Autodisplay, *Int. J. Mol. Sci.*. 23, 2022, 459
- A Fully-Human Antibody Specifically Targeting a Membrane-Bound Fragment of CADM1 Potentiates the T Cell-Mediated Death of Human Small-Cell Lung Cancer Cells, *Int. J. Mol. Sci.* 2022, *23*(13), 6895
- An internalizing antibody targeting of cell surface GRP94 effectively suppresses tumor angiogenesis of colorectal cancer, *Biomedicine & Pharmacotherapy*, 150 (2022) 113051
- Switching peptides for one-step immunoassay and its application to the diagnosis of Human hepatitis B, *Biosensors and Bioelectronics*, 178 (2021) 112996
- Anti-SARS-CoV-2 Nucleoprotein Antibodies Derived from Pig Serum with a Controlled Specifcity, *Biochip Journal*, 15, 2021, 195-203.
- Discovery of Orphan Olfactory Receptor 6M1 as a New Anticancer Target in MCF-7 Cells by a Combination of Surface Plasmon Resonance-Based and Cell Based Systems, *Sensors*, 14(4), 2021, 3468.
- Pig Sera-derived Anti-SARS-CoV-2 Antibodies in Surface Plasmon Resonance Biosensors, *Biochip Journal*, 14(4), 2020, 358-368.
- Miniaturized surface plasmon resonance biosensor with vacume-driven hydrodynamic focusing, *Sensor and Actuators B: Chemicals*, Vol. 254, 2018, 64-71
- Surface Plasmon Resonance Sensing of a Biomarker of Alzheimer Disease in an Intensity Measurement Mode with a Bimetallic Chip, Journal of the Korea Physical Society, Vol. 69, 2016, 793-797
- Ultrasensitive Detection of Single-Walled Carbon Nnotubes using Surface Plasmon Resonance, *Analytical Chemistry*, Vol. 88, 2015, 968-973
- A Novel Algorithm based on the Coefficient of Determination of Linear Regression Fitting to Automatically Find the Optimum Angle for Miniaturized Surface Plasmon Resonance Measurement, *Sensors and Actuators B: Chemical*, Vol. 199, 2014, 488-492
- Detection of Amyloid-β42 Using a Waveguide-Coupled Bimetallic Surface Plasmon Resonance Sensor Chip in the Intensity Measurement Mode, *PLOS ONE*, Vol. 9, 2014, e98992
- Sensitive and Selective Analysis of a Wide Concentration Range of IGFBP7 using a Surface Plasmon Resonance Biosensor, *Colloids and Surfaces B: Biointerfaces*, Vol. 123, 2014, 887–891





