

Standard and Sensor Chip Wet Storage

A General Guide for NanoAu-MM Standard and Sensor Chips

Standard Chip NanoAu-MM and Sensor Chip NanoAu-MM are intended for standard curve establishment and sample detection, respectively, of most general biomolecular interactions with the Light-Sensing Biomarker Analyzer. The carboxyl sensing surface can be covalently functionalized with receptor ligands for the detection of small organic compounds, oligonucleotides, proteins, viruses, and bacteria. Upon immobilization of receptor ligands, the standard or sensor chips can be stored at 4°C for future use. As seen in Fig. 1, signal ratio of IgG is consistent from Day 1 (Day 0 is defined as the day of receptor ligand immobilization) to Day 8. The chips can generally be stored for up to one week under this condition. However, usability of the chips is dependent on the stability of the receptor ligands and should be determined empirically.

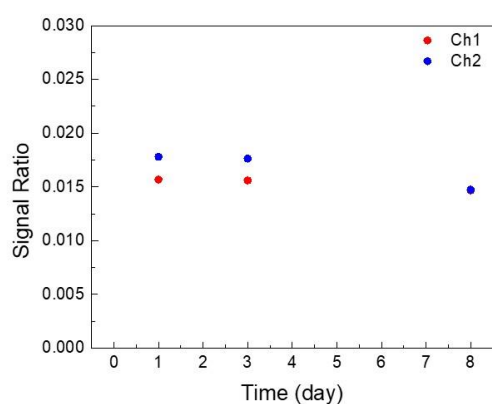


Fig. 1 Signal ratio plot of IgG on different days after receptor ligand immobilization.

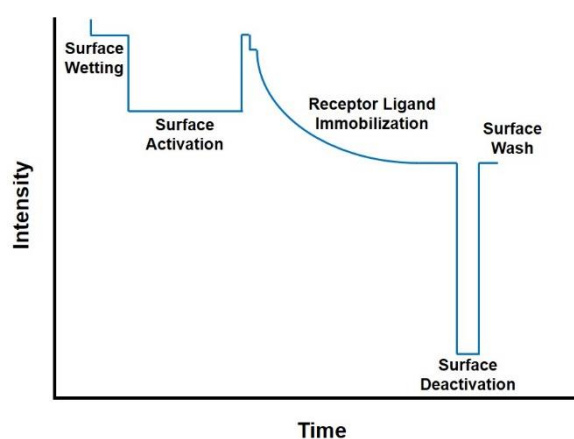


Fig. 2 General Standard/Sensor Chip NanoAu-MM surface modification sensorgram.

Wet Storage Protocol

1. Follow the receptor ligand immobilization protocol for Standard Chip NanoAu-MM or Sensor Chip NanoAu-MM until the surface wash (buffer solution, 3 times) after surface deactivation. A general sensorgram is displayed in Fig. 2.
 Note: Receptor ligands do not need to be immobilized in the Light-Sensing Biomarker Analyzer and can be done in the chip storage box (sold separately).
2. Place the chip(s) in the chip storage box and close the lid. The chip storage box has an airtight design to prevent the chip(s) from drying out.
3. Place the chip storage box at 4°C.
4. Use the chip(s) within one week of receptor ligand immobilization. The chip(s) should be placed at room temperature for at least 30 minutes prior to starting an experiment run.
5. Add buffer solution (1 time) to the chip(s) for surface equilibrium before standard curve establishment or sample detection.