

Chip Production- α S1-casein Modification to Gold Chip

1. Dip the gold chips in 10mM MUA, RT for 4hrs.
2. Wash the chips with 95% EtOH three times and dry.
3. Add EDC+NHS mixture (100+100mM in DDW) on chips, RT for 1hrs.
4. DDW rinse the chips and dry.
5. Add α S1-casein on chips, RT for 1hrs.
6. Wash with PBS three times and dry.
6. Dip the chips in blocking solution, RT for 1.5hrs.
7. Wash with PBS three times and dry.

Measurement protocol of Curcumin Biosensor

1. Add the diluted curcumin samples on our biosensor to react for 30min.
2. Rinse with wash buffer and dry the chips.
3. Wash the reference and counter electrodes with DDW, and dry them.
4. Set up the three electrodes system within electrochemical cell.
5. Use the prototype of electrochemical machine to measure the DPV method.