

Preparation of a lipid mono layer surface coating in the ibidi μ -Slide I

Used Lipid: SOPC (Stearoyl-Oleoyl-Phosphatidylcholine)
Used μ -Slide: ordering number 80111 (sterile)

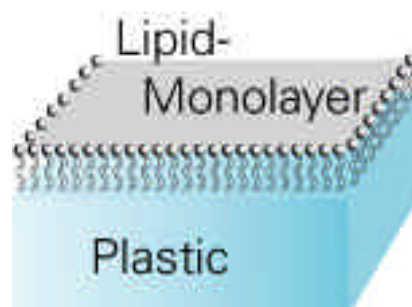
Preparation of dry lipids (Only necessary if lipids are delivered in chloroform):
Fill 1mg of dissolved lipids in a clear glass vessel. Remove chlorophorm under a slight nitrogen stream. Remove the rest of chloroform by storing the open glass vessel in a vacuum chamber for several hours.

Preparing the lipid solution:

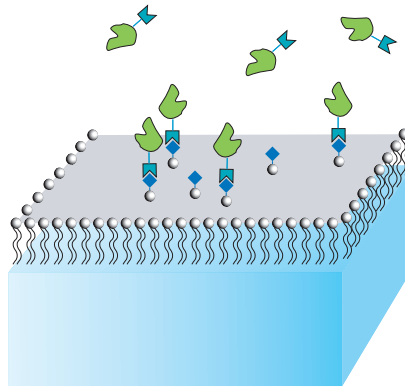
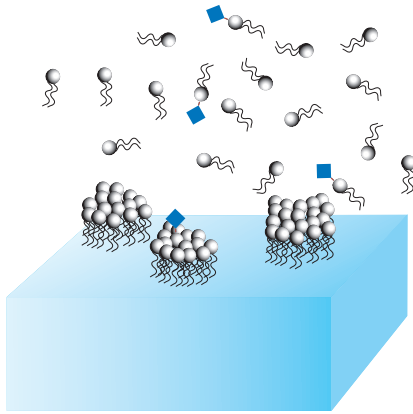
Dissolve 1mg dried lipids in 1 ml of a 70/30 milliQ water-isopropanol mixture in a clear glass vessel. Vortex for 30 sec. In the case the solution is not absolutely clear carefully titrate isopropanol to the solution until the solution is absolutely clear.

Preparing the lipid surface coating:

Fill 0,1 ml of the lipid solution into the channel. Slowly (about 1ml in 30 sec) add pure milliQ-water into one of the two vessels (vessel 1) in order to exchange the lipid solution against clear water. Remove the liquid successively from vessel 2. Rinse extensively with pure water to remove the alcohol totally.



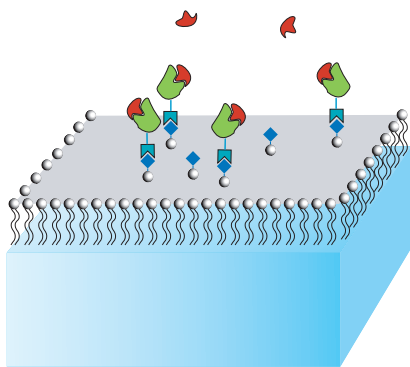
Examples for lipid coatings



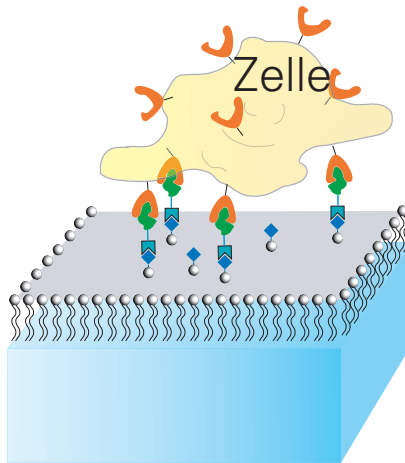
Matrix-lipid

Chelator-lipid

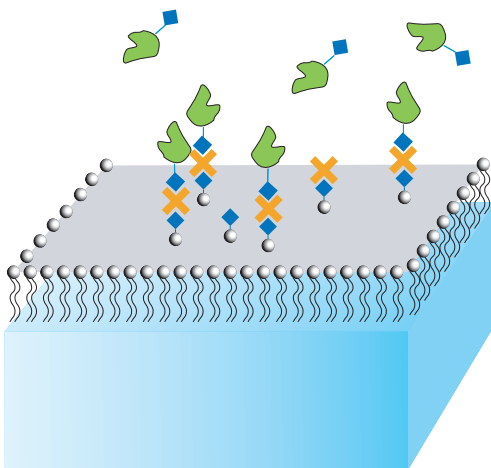
Histidintag



antibody-antigen



In vitro cell investigations



biotinylated lipid

streptavidin

biotinylated protein

- 30 sec preparation
- homogenously distributed binding sites
- no protein denaturation
- no unspecific binding