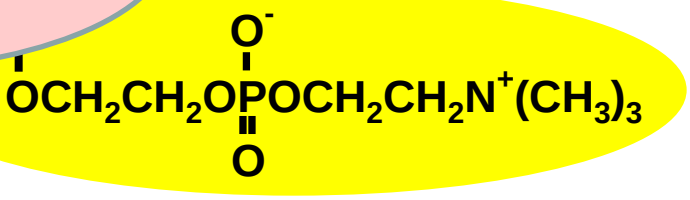
Lipidure®-SF

Lipidure®-SF series are surfactants consisted of phosphorylcholine, which is polar group of phospholipids in biological membranes, and hydrophobic group.

Chemical Structure

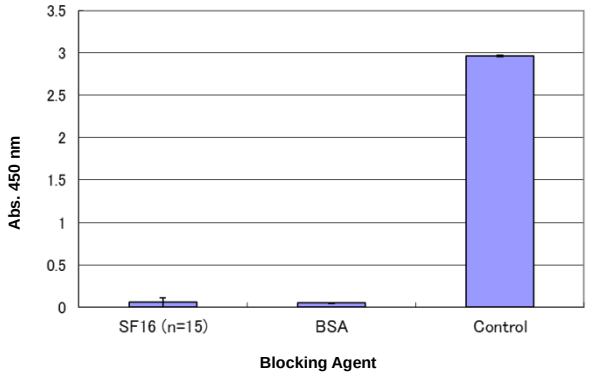
Hydrophobic group

Phosphorylcholine : Biocompatibility
Polar head group of phospholipids in biological membranes

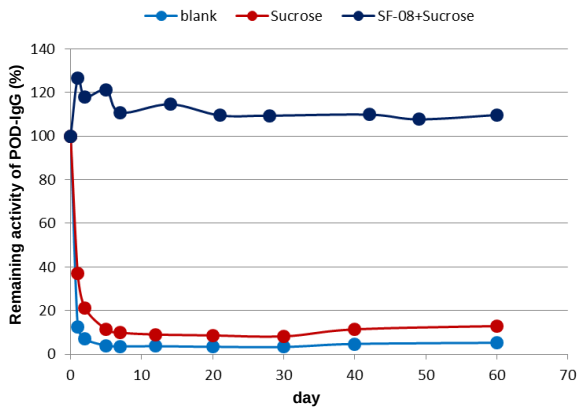


Use of Lipidure®-SF series as adduct allows suppression of non-specific adsorption of agent and/or analyte (SF16) and stabilization of protein (SF08).

・Suppression of non-specific adsorption (Blocking)



・Stabilization of Protein (POD-IgG)



Name	CMC（wt%）	Product form
Lipidure®-SF08	0.1	5wt% aq.
Lipidure®-SF16	0.0015	1wt% aq.

***Please contact us if you are interested in another chain-length (n) product.**

Experimental details

＜Suppression of non-specific adsorption (Blocking)＞

1. 0.5 wt% of Lipidure®-SF16 solution was prepared with Dulbecco's PBS(D-PBS).
2. 200 μL of the solution was added to each well (maxi soap 96F plate made by Nunc).
3. The plate was incubated at room temperature for 2 hours .
4. After the solutions were removed, the plate was dried overnight in desiccator.
5. Each well was washed with D-PBS (3 times × 200 μL/well).
6. 100 μL of POD-IgG (Peroxidase-labeled anti-mouse IgG) solution diluted 20000 times with D-PBS was added to each well.
7. The plate was washed with Tween20-contaning PBS (4 times × 200 μL/well).
8. 100 μL of TMBZ reaction solution was added to each well and reacted at room temperature for 7 min..
9. The reaction was quenched with 50 μL of 2N sulfuric acid and measured absorbance at 450 nm using a plate reader.

＜Stabilization of Protein (POD-IgG)＞

1. 20 wt% of sucrose solution and 0.2 wt% of Lipidure®-SF08 solution were prepared with D-PBS.
2. 0.1wt% of Lipidure®-SF08 solution contained 10 wt% of sucrose solution was prepared by mixing an equal amount of the solutions.
3. POD-IgG was diluted 20000 times with the solution.
4. The solution was stored in refrigerator at 4 ℃.
5. 8 μL of the solution was added to each well (maxi soap 96F plate made by Nunc) at set hours.
5. 100 μL of reaction solution was added to each well and reacted at room temperature for 7 min..
6. The reaction was quenched with 50 μL of 2N sulfuric acid and measured absorbance at 450 nm using a plate reader.

Precautions for safe handling

1. Please store in refrigerator and bring back to room temperature before use.
2. Please be careful to bubble in case of being shaken intensely.
3. Although Lipidure®-SF16 precipitates under refrigeration, the performance is not affected. Please be dissolved the precipitation by heating before use.

NOF Corporation

Life Science Products Division
Yebisu Garden Place Tower, 20-3, Ebisu 4-chome, Shibuya-ku, Tokyo 150-6019, Japan
TEL. +81-3-5424-6771 / FAX. +81-3-5424-6802
E-mail: g_honn_ls@nof.co.jp