

# JBScreen Detergents 2

## A Supplement for JBScreen Membrane

**JBScreen Detergents** can be used throughout the protein purification process or can be added afterwards by dialysis or ion-exchange chromatography (detergent exchange). Detergent exchange can be vital for obtaining well-diffracting membrane-protein crystals<sup>1</sup>. The **JBScreen Detergents** kits are also valuable for additive screening with detergents and detergent mixtures<sup>2,3</sup> in combination with the **JBScreen Membrane** kit.

Each **JBScreen Detergents** kit contains 12 detergents, supplied as stock solution at 5 or 10 times the reported CMC (Critical Micellar Concentration).

The recommended final detergent concentration in a hanging-drop experiment (prior to equilibration) is 1 to 3 x the CMC.

Storage: 4 °C

- [1] Rosenow *et al.* (2003) The influence of detergents and amphiphiles on the solubility of the light harvesting complex. *Acta Cryst.* **D59**, 1422.  
 [2] Adir (1999) Crystallization of the oxygen-evolving reaction centre of photosystem II in nine different detergent mixtures. *Acta Cryst.* **D55**, 891.  
 [3] Koronakis *et al.* (2000) Crystal structure of the bacterial membrane protein TolC central to multidrug efflux and protein export. *Nature* **405**, 914.

No.	Detergent	CMC (mM)	conc. Stock solution (mM) (5 or 10 x CMC)	Amount
D 2 - 1	Pentaethylene glycol monooctyl ether (C8E5)	7.1	71	100 µl
D 2 - 2	3-[(3-Cholamidopropyl)dimethylammonio]-1-propanesulfonate (CHAPS)	8.0	80	100 µl
D 2 - 3	3-[(3-Cholamidopropyl)dimethylammonio]-2-hydroxy-1-propanesulfonate (CHAPSO)	8.0	80	100 µl
D 2 - 4	Pentaethylene glycol monodecyl ether (C10E5)	0.81	8.1	100 µl
D 2 - 5	N,N-Dimethyldecylamine-N-oxide (DDAO)	10.4	104	100 µl
D 2 - 6	Octyl- β -D-glucopyranoside	25	250	100 µl
D 2 - 7	N-Nonanoyl-N-methylglucamine (MEGA-9)	25	250	100 µl
D 2 - 8	3-(Decyldimethylammonio)propane-1-sulfonate (ZWITTERGENT®3-10)	40	400	100 µl
D 2 - 9	Heptyl- β -D-glucopyranoside	79	790	100 µl
D 2 - 10	N-Octanoyl-N-methylglucamine (MEGA-8)	79	790	100 µl
D 2 - 11	Hexyl- β -D-glucopyranoside	250	1250	200 µl
D 2 - 12	3-(N,N-Dimethyloctylammonio)propane-sulfonate (ZWITTERGENT®3-8)	330	1650	200 µl

**JBScreen Membrane & JBScreen Detergents:  
A Winning Combination!**