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Running title: ***Purification and analysis of Cai***

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Abbreviations: BS^3, bis(sulfosuccinimidyl)suberate; $C_{12}E_8$, dodecyl octaethylene glycol ether; $C_{12}E_9$, dodecyl nonaethylene glycol ether; CD, circular dichroism; Cholate, 3α,7α,12α-trihydroxy-5β-cholan-24-oic acid, monosodium salt; CHAPS 3-[(3-cholamidopropyl)-dimethylammonio]-1-propanesulfonate; CHAPSO, 3-[(3-cholamidopropyl)dimethylammonio]-2-hydroxy-1-propanesulfonate; CPM, N-[4-(7-diethylamino-4-methyl-3-coumarinyl)phenyl]-maleimide; DDAO, Decyldimethylamineoxide; DDM, *n*-dodecyl-β-D-maltoside; DH_6PC, 1,2-dihexanoyl-*sn*-glycero-phosphocholine; DH_7PC 1,2-diheptanoyl-*sn*-glycero-phosphocholine; DM, *n*-decyl-β-D-maltoside; DPC, *n*-dodecylphosphocholine; GFP, green fluorescent protein; HMQC, Heteronuclear Multiple Quantum Coherence; IGF, in-gel fluorescence; IMP, Integral membrane protein; LAPAO, 3-dodecylamido-N,N'-dimethylpropyl amine oxide; LDAO, lauryldimethylamine-N-oxide; LUV: large unilamellar vesicle; NM, *n*-nonyl-β-D- maltoside; NMR, nuclear magnetic resonance; OLPC, lyso-oleoyl-*sn*-Glycero-3-phosphatidyl-choline; OLPG, lyso-oleoyl-*sn*-glycero-3-phosphatidyl-glycerol; PDC, Protein-detergent complex; pf-ColA, pore forming C-terminal domain of colicin A; OG, *n*-octyl-β-D-glucoside; SDS, sodium dodecyl sulfate; SDS-PAGE, polyacrylamide gel electrophoresis (PAGE) in the presence of sodium dodecyl sulfate (SDS); TDAO, tetradecyldimethylamineoxide; TX-100 (Also Triton X-100), α- [4-(1,1,3,3-tetramethylbutyl)phenyl]-ω-hydroxy-poly(oxy-1,2-ethanediyl)]; WHH, width at half height; Zwittergent 3.12, *n*-dodecyl-N, N-dimethyl-3-ammonio-1-propanesulfonate; Zwittergent 3.14, *n*-tetradecyl-N, N-dimethyl-3-ammonio-1-propanesulfonate; Ɛ, ellipticity; Θ, residue molar ellipticity.