Certain types of porphyrins can be used as achiral agent for determination of enantiomeric excess (*ee*) of chiral molecules. Particular organic chiral molecule (guest) and porphyrin (host) form host-guest complex while inducing nonequivalency of particular proton resonances in symmetrical host. It causes splitting of NMR signals linearly dependent on *ee* of guest. In this work we investigated complexation of di-brombenzylated oxoporphyrin with chiral camphorsulfonic acid. NMR titration revealed that they form complex with 1:1 stoichiometry with association constant $K \approx 5 \times 10^4$ l/mol. We confirmed linear dependence of splitting of host β-protons on *ee* of guest. Low temperature measurements revealed two conformations of host-guest complex with population around 0.7:0.3 (at -60 °C). DFT quantum mechanical computations at BLYP/3-21G* level revealed also two conformations with population 0.79:0.21. NMR shifts were computed on this geometries with method GIAO/PBE1PBE/6-31G(2df,2pd) and compared to experimental values.