### Supplementary material

**3D structure of a *Brucella melitensis* porin: molecular modelling in lipid membranes**

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**Figure S1: Ramachandran plot of the Omp2a 3D structure built by RaptorX.**



Figure S2: Omp2a topology of the predicted model of Omp2a.



Figure S3: Plot of the minimum radius of the Omp2a channel along the main axis of the protein. The radius was calculated by HOLE using a water probe with a radius of 1.45 Å. The constriction zone of a radius of 3.72 Å is found at Z = 0 Å.



**Figure S4: Percentage of secondary structure for the three bilayers POPC, POPE and POPC/POPE. β-strands are represented in yellow, α-helices in red, turns in cyan and loops in grey. The secondary structure was calculated by DSSP for each monomer and averaged for each time.**