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LCP crystallisation and its challenge with the D2L receptor

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Self-assembly lipids have been used to solve a number of G-protein coupled receptor structures to date and the mechanism behind it still remains a mystery. Here we report on two factors; lipid incubation time and protein concentration and investigate three different lipid systems; monoolein (MO), phytantriol (PT) and phytanoyl ethanomide (PE), which influenced the uptake of the Dopamine 2 long (D2L) receptor into the lipid structure. We show reasons why the D2L receptor has proven to be difficult to crystallize in the commercial cubic phase lipid, MO, and show why we need to develop novel crystallization media.

Keywords or phrases (comma separated)

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Summary

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