**Figure 4 - source data 4. Photobleaching data for dimeric control CLC-ec1 R230C/L249C, RCLC-Cy5 in 20% DL, 80% PO, 2:1 PE/PG lipids.** 𝜒\* is the reactive molar ratio of protein subunits and lipids, based on the observed mole fraction calculated from the protein and lipid quantification assays, and assuming the reaction occurs between oriented species in the membrane, 𝜒\* = 𝜒/2. Data are represented as mean ± standard error. Sample numbers, n, are listed separately for (mole fraction quantification, photobleaching analysis).

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **density (μg/mg)** | **𝜒\* (subunits/lipid)** | **PCy5** | **incubation time (d)** | **P1** | **P2** | **P3+** | **n** |
| 0.0001 | 9.72 x 10-10 | 0.73 ± 0.02 | 3.0 ± 0.0 | 0.40 ± 0.14 | 0.44 ± 0.07 | 0.16 ± 0.07 | (1,2) |
| 0.001 | (4.06 ± 0.53) x 10-9 | 0.73 ± 0.01 | 3.7 ± 0.7 | 0.41 ± 0.08 | 0.47 ± 0.03 | 0.12 ± 0.05 | (2,3) |
| 0.01 | (2.69 ± 0.28) x 10-8 | 0.77 ± 0.02 | 3.7 ± 0.3 | 0.38 ± 0.08 | 0.48 ± 0.02 | 0.14 ± 0.05 | (2,3) |
| 0.1 | (2.77 ± 0.76) x 10-7 | 0.77 ± 0.02 | 3.7 ± 0.3 | 0.30 ± 0.07 | 0.46 ± 0.02 | 0.24 ± 0.06 | (2,3) |
| 0.5 | (1.17 ± 0.48) x 10-6 | 0.73 ± 0.02 | 3.0 ± 0.0 | 0.21 ± 0.00 | 0.39 ± 0.01 | 0.40 ± 0.01 | (2,2) |