**Table S8 - Reversibility of bioactive lipid inhibition of WT GlyT2 expressed in *Xenopus laevis* oocytes pre and post cholesterol depletion†.**

|  |  |
| --- | --- |
|  | **Condition** |
|  | **Control** | **MβCD** |
| **Compound** | **Half-life****(min)** | **Recovery at****30 min (%)** | **Half-life****(min)** | **Recovery at****30 min (%)** |
| Oleoyl-L-Lysine | n.d.a | 55.1 ± 1.5 | n.d.a | 63.0 ± 4.1 |
| Oleoyl-L-Carnitine | n.d.a | 45.7 ± 3.4 | n.d.a | 92.4 ± 3.1\*\*\*\* |
| Oleoyl-L-Leucine | 2.3 ± 0.5 | 51.1 ± 2.7 | 3.1 ± 0.3 | 92.2 ± 3.7\*\*\*\* |
| Oleoyl-L-Tryptophan | No Recovery | No Recovery | No Recovery | No Recovery |

† Reversibility of inhibitors was determined by co-applying an IC50 concentration of inhibitor with an EC50 concentration of glycine to *Xenopus laevis* oocytes expressing WT GlyT2 for 4 minutes. Following exposure to inhibitors, the EC50 of glycine was reapplied at 5-minute intervals for 30-minutes. Cholesterol depletion was performed by incubating oocytes in 15 mM MβCD for 30 minutes at 32°C. Oocytes were washed in recording buffer for 10 minutes after treatment to ensure the removal of residual MβCD. Values are presented as mean ± SEM with n ≥ 5 from at least two batches of oocytes. Differences in half-life and recovery at 30 min values between control and MβCD conditions were determined via two-tailed unpaired t-tests. Statistical significance is presented as \* p ≤ 0.05, \*\* p ≤ 0.01, \*\*\* p ≤ 0.001 and \*\*\*\* p ≤ 0.0001.

a Half-life was not determined as recovery did not plateau within the time course of the assay.