

Supplementary Materials

Protective effects of 3'-epilutein and 3'-oxolutein against glutamate-induced neuronal damage

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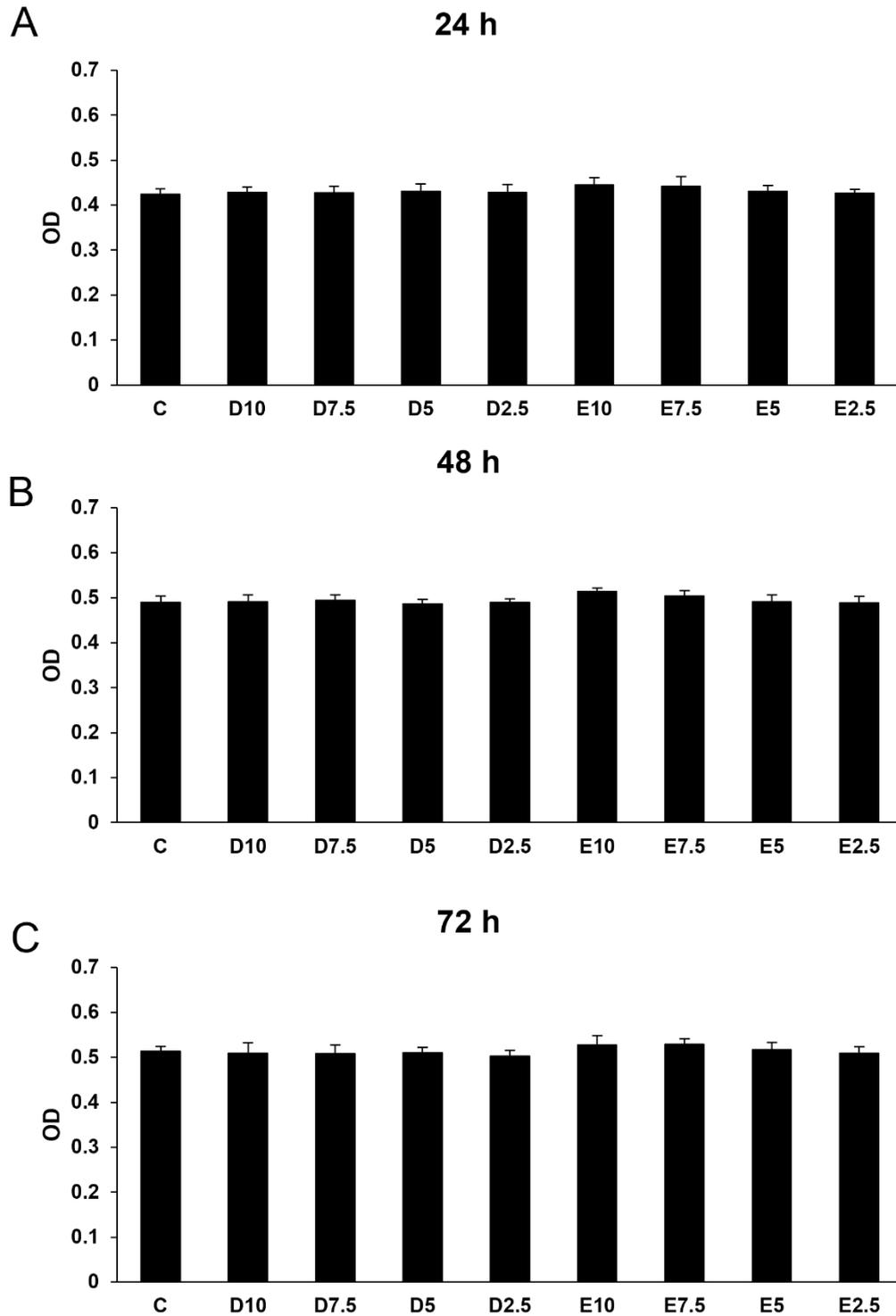


Figure S1. Cell viability determinations of the 3'-epilutein-treated SH-SY5Y cells. Viability was measured using a resazurin-based cell viability assay after 3'-epilutein treatments. The mean optical density of the wells indicates the viable cells from four independent experiments, each measured in triplicate. Viability is expressed as a percentile of the total cell number of the appropriate DMSO-treated control cells. (A) Cell viability of 3'-epilutein and DMSO-treated SH-SY5Y cells at 24 h. (B) Cell viability of 3'-epilutein and DMSO-treated SH-SY5Y cells at 48 h. (C) Cell viability of 3'-epilutein and DMSO-treated SH-SY5Y cells at 72 h. The bars represent mean values and error bars represent the standard deviation (\pm SD) for four independent experiments ($n=4$). Abbreviations of treatments: C-absolute control; DMSO controls: D2.5-DMSO equivalent to 2.5 ng/ μ L of 3'-epilutein; D5-DMSO equivalent to 5 ng/ μ L of 3'-epilutein; D7.5-DMSO equivalent to 7.5 ng/ μ L of 3'-epilutein; D10-DMSO equivalent to 10 ng/ μ L of 3'-epilutein; E2.5- 2.5 ng/ μ L of 3'-epilutein; E5- 5 ng/ μ L of 3'-epilutein; E7.5- 7.5 ng/ μ L of 3'-epilutein; E10- 10 ng/ μ L of 3'-epilutein; OD-optical density.

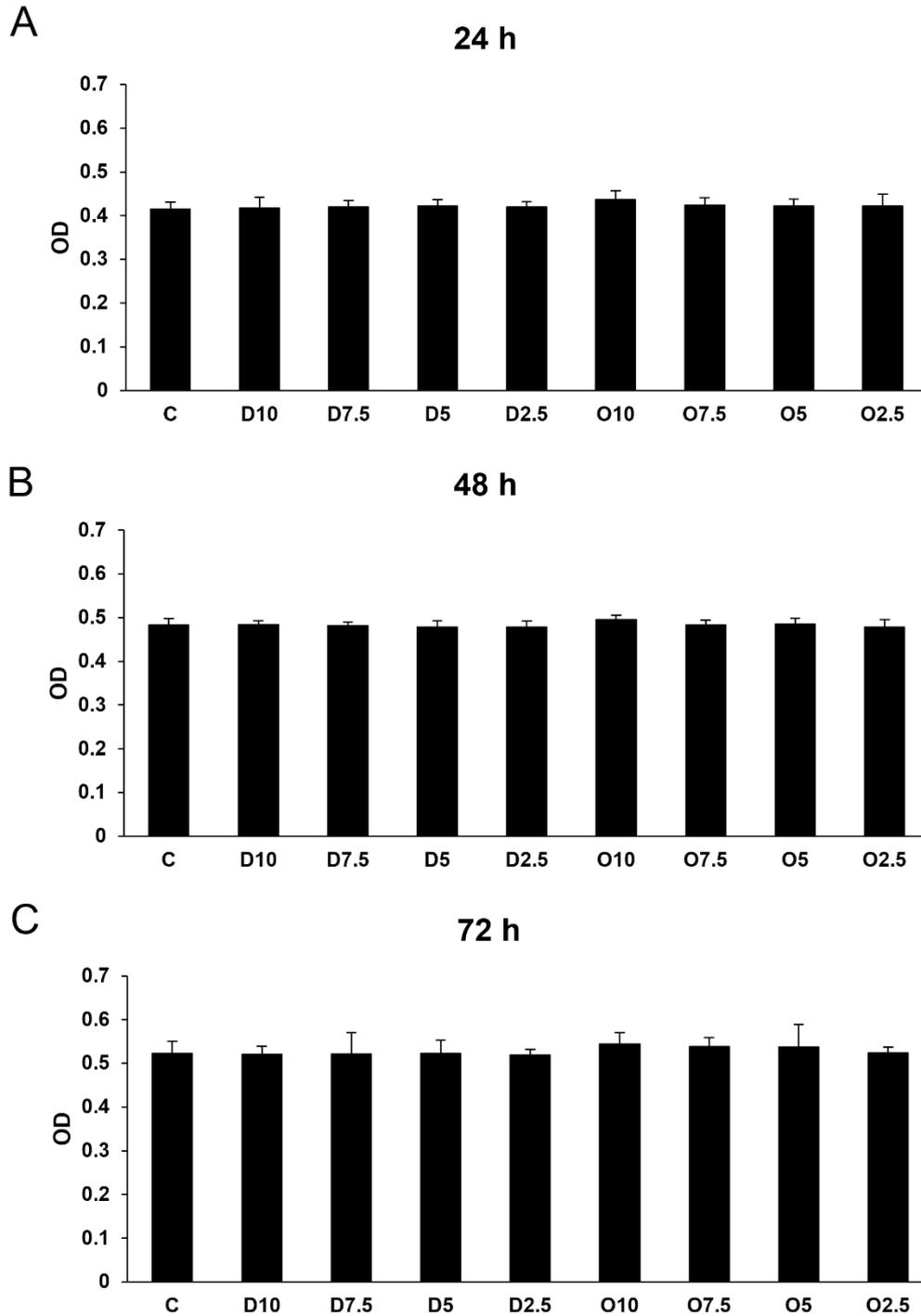


Figure S2. Cell viability determinations of the 3'-oxolutein-treated SH-SY5Y cells. Viability was measured using a resazurin-based cell viability assay after 3'-oxolutein treatments. The mean optical density of the wells indicates the viable cells from four independent experiments, each measured in triplicate. Viability is expressed as a percentile of the total cell number of the appropriate DMSO-treated control cells. (A) Cell viability of 3'-oxolutein and DMSO-treated SH-SY5Y cells at 24 h. (B) Cell viability of 3'-oxolutein and DMSO-treated SH-SY5Y cells at 48 h. (C) Cell viability of 3'-oxolutein and DMSO-treated SH-SY5Y cells at 72 h. The bars represent mean values and error bars represent the standard deviation (\pm SD) for four independent experiments (n=4). Abbreviations of treatments: C-absolute control; DMSO controls: D2.5-DMSO equivalent to 2.5 ng/ μ L of 3'-oxolutein; D5-DMSO equivalent to 5 ng/ μ L of 3'-oxolutein; D7.5-DMSO equivalent to 7.5 ng/ μ L of 3'-oxolutein; D10-DMSO equivalent to 10 ng/ μ L of 3'-oxolutein; O2.5- 2.5 ng/ μ L of 3'-oxolutein; O5- 5 ng/ μ L of 3'-oxolutein; O7.5- 7.5 ng/ μ L of 3'-oxolutein; O10- 10 ng/ μ L of 3'-oxolutein, OD-optical density.

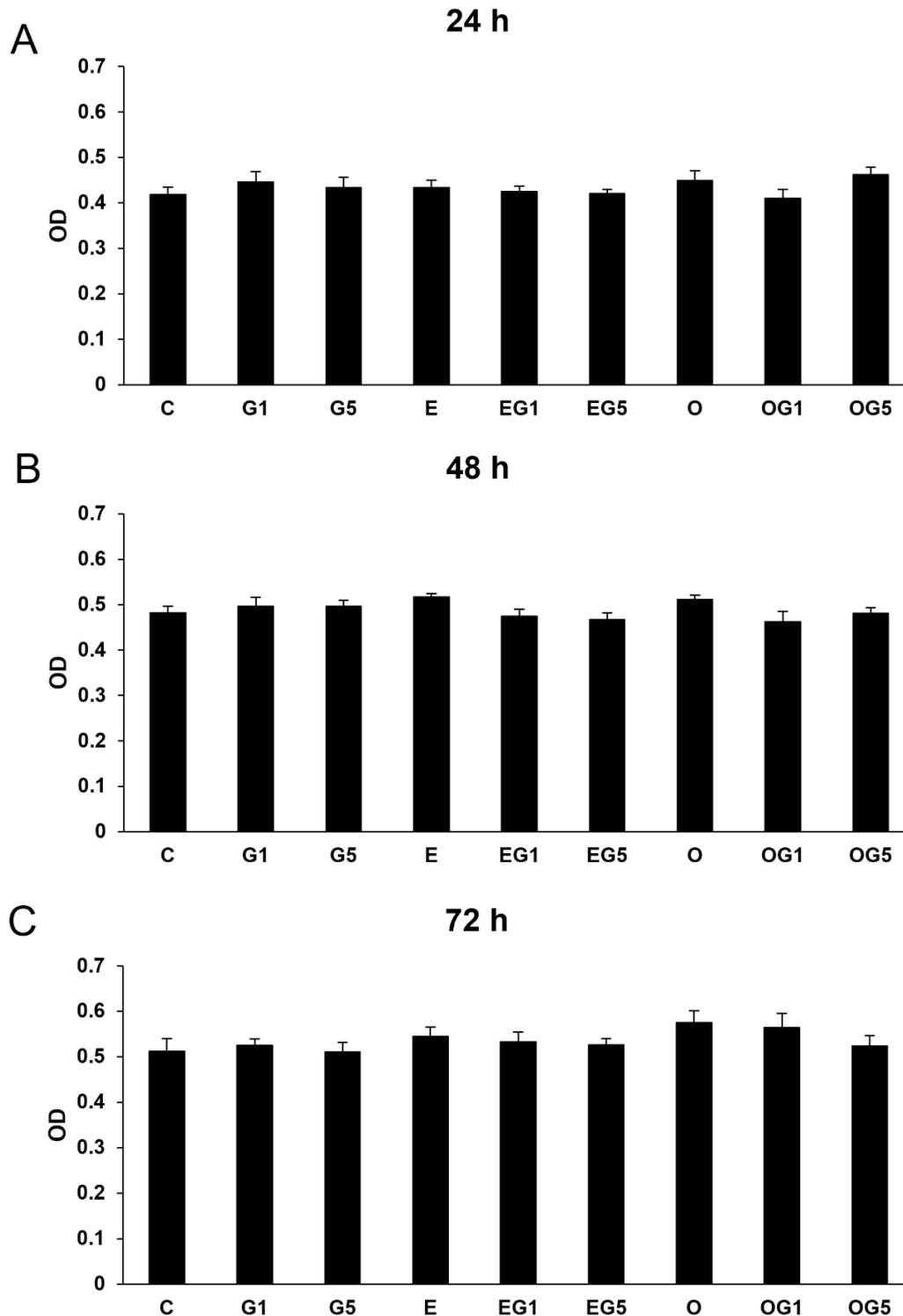


Figure S3. Cell viability of 3'-epilutein, 3'-oxolutein and glutamate-treated SH-SY5Y cells. Cell viability determinations of the 3'-oxolutein-treated SH-SY5Y cells. Viability was measured using a resazurin-based cell viability assay after 3'-oxolutein treatments. The mean optical density of the wells indicates the viable cells from four independent experiments, each measured in triplicate. Viability is expressed as the percentile of the total cell number of the untreated control cells, in the case of 3'-epilutein and 3'-oxolutein as a percentile of the total cell number of the appropriate DMSO-treated control cells. (A) Cell viability of 3'-epilutein, 3'-oxolutein and glutamate-treated SH-SY5Y cells at 24 h. (B) Cell viability of 3'-epilutein, 3'-oxolutein and glutamate-treated SH-SY5Y cells at 48 h. (C) Cell viability of 3'-epilutein, 3'-oxolutein and glutamate-treated SH-SY5Y cells at 72 h. The bars represent mean values and error bars represent the standard deviation (\pm SD) for four independent experiments ($n = 4$). Abbreviations: C- control; G1- 1mM glutamate; G5- 5 mM glutamate; E- 3'-epilutein; O- 3'-oxolutein; EG1- 3'-epilutein + 1 mM glutamate; EG5- 3'-epilutein + 5 mM glutamate; OG1- 3'-oxolutein + 1 mM glutamate; OG5- 3'-oxolutein + 5 mM glutamate; OD-optical density.