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Drug treatments

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Protocol status: Working

We use this protocol and it's working

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Abstract

Drug treatments

Materials

CDDO-Me (CAS number 218600-53-4, Cayman Chemical, Ann Arbor, MI, USA)

GTTP (CAS number 1131626-47-5, MedChemExpress).

Lipopolysaccharides from Escherichia coli O111:B4, Ultrapure (LPS-EB Ultrapure; Catalog code: tlr1-3pelps; InvivoGen, San Diego, CA, USA)

SAM-HCl (CAS number 86867-01-8; Merck, Darmstadt, Germany)

FIDAS V (CAS number 1391934-98-7; MedChemExpress, Monmouth Junction, NJ, USA)

MCHA (CAS number CDS019932; Sigma-Aldrich), MitoQ (CAS number 845959-50-4; Cayman Chemical)

etoposide (CAS number 33419-42-0; MedChemExpress)



Drug treatments

- 1 Prepare CDDO-Me, GTTP, LPS-EB Ultrapure, SAM-HCl, FIDAS V, MCHA, MitoQ, and etoposide by following the manufacturer's instructions for each compound
- 2 Dilute each prepared drug to the specified concentrations in the culture medium
- 3 For iPSC-derived neurons, astrocytes, and microglia, apply CDDO-Me at increasing concentrations at the specified timepoints, as indicated in the relevant figure legends
- 4 Apply GTTP to iPSC-derived microglia according to the timepoints indicated in the figure legends
- 5 For additional treatments, apply LPS-EB Ultrapure, SAM-HCl, FIDAS V, MCHA, MitoQ, and etoposide to the cultures at the indicated concentrations and timepoints as specified in the figure legends
- 6 For control cultures, add an equivalent volume of the vehicle solvent used to dissolve each compound
- 7 Incubate the cultures with the drug treatments for the durations specified in the figure legends