



Feb 08, 2024

ASO transfection of iPSC-derived cells

DOI

dx.doi.org/10.17504/protocols.io.81wgbxbonlpk/v1

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DOI: <https://dx.doi.org/10.17504/protocols.io.81wgbxbonlpk/v1>

Protocol Citation: James Evans 2024. ASO transfection of iPSC-derived cells. **protocols.io**
<https://dx.doi.org/10.17504/protocols.io.81wgbxbonlpk/v1>

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Protocol status: Working

We use this protocol and it's working

Created: February 07, 2024



Last Modified: February 08, 2024

Protocol Integer ID: 94881

Keywords: transfection, ASO, midbrain dopaminergic neurons with antisense oligonucleotide, antisense oligonucleotide, dopaminergic neuron, transfecting ipsc, aso transfection, neuron, derived midbrain, derived cell, transfection, aso

Abstract

A protocol for transfecting iPSC-derived midbrain dopaminergic neurons with antisense oligonucleotides (ASOs).

Troubleshooting

ASO transfection of iPSC-derived mDA neurons

- 1 Make up transfection mix in N2B27. The transfection mix should be 1/5 of the final volume in the well.
Transfection mix should have:
 1. 0.48 % **DharmaFECT** transfection reagent
 2. ASO (adjust concentration depending on cell type, ASO chemical modification, and knockdown required). Calculate final concentration required in the well not in the transfection mix.Example - 1000 ul final volume in the well with 300 nm of ASO = 200 ul of N2B27 + 0.96 ul of DharmaFect + 3 ul of 100 uM ASO Stock
- 2 Vortex transfection mix and leave at room temperature for 30 minutes.
- 3 Aspirate media from cells and replace with the transfection mix. After adding the transfection mix add the rest of the media to the cells to make up the final volume.