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ASO transfection of iPSC-derived cells

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Protocol status: Working
We use this protocol and it's working

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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.