Figure S2

A

|     | D1 | D2 | D3 | D4 | D5 | D6 | D7 |
|-----|----|----|----|----|----|----|----|
| GFP | +  | +  | -  | +  | -  | +  | D1 |
| oe-M3 | - | +  | +  | -  | +  | -  | +  |
| MHC | +  | +  | +  | +  | +  | +  | +  |
| GAPDH | + | +  | +  | +  | +  | +  | +  |
| METTL3 | +  | +  | +  | +  | +  | +  | +  |
| GFP | +  | +  | +  | +  | +  | +  | +  |

B

|     | D1 | D2 | D3 | D4 | D5 | D6 | D7 |
|-----|----|----|----|----|----|----|----|
| GFP | +  | +  | +  | +  | +  | +  | +  |
| oe-M14 | - | -  | -  | -  | -  | -  | -  |
| MHC | +  | +  | +  | +  | +  | +  | +  |
| METTL14 | +  | +  | +  | +  | +  | +  | +  |
| GAPDH | + | +  | +  | +  | +  | +  | +  |

C

D
Figure S3

A

MHC

Relative Expression (MHC)

D2  D4  D6

MEF2C

Relative Expression (MEF2C)

D2  D4  D6

METTL3

Relative Expression (METTL3)

D2  D4  D6

MuSC-GFP

MuSC-M3

B

MHC

Relative Expression (MHC)

D2  D4  D6

MEF2C

Relative Expression (MEF2C)

D2  D4  D6

METTL14

Relative Expression (METTL14)

D2  D4  D6

MuSC-GFP

MuSC-M14

METTL14

Relative Expression (METTL14)

D2  D4  D6

MuSC-GFP

MuSC-M14
Figure S4

A

|    | GM | D1 | D2 | D3 | D4 | D5 | D6 | MW (kDa) |
|----|----|----|----|----|----|----|----|----------|
| p-ATK (Thr308) |    |    |    |    |    |    |    | 60       |
| p-ATK (Ser473)  |    |    |    |    |    |    |    | 60       |
| GAPDH          |    |    |    |    |    |    |    | 37       |

B

|    | GFP | oe-M3 | dCas9-Ctrld | dCas9-M3-1dCas9-M3-2 | MW (kDa) |
|----|-----|-------|-------------|----------------------|----------|
| p-ATK (Thr308) |    |    |    |    | 60   |
| p-ATK (Ser473)  |    |    |    |    | 60   |
| GAPDH          |    |    |    |    | 37   |

C

|    | GFP | oe-M14 | dCas9-Ctrld | dCas9-M14-1dCas9-M14-2 | MW (kDa) |
|----|-----|-------|-------------|------------------------|----------|
| p-ATK (Thr308) |    |    |    |    | 60   |
| p-ATK (Ser473)  |    |    |    |    | 60   |
| GAPDH          |    |    |    |    | 37   |
Figure S5

**MHC**

- **Relative Expression**
  - **D0**
  - **D3**

**MEF2C**

- **Relative Expression**
  - **D0**
  - **D3**

- **X-axis**: Days 0 and 3 (D0, D3)
- **Y-axis**: Relative Expression

- **Legend**:
  - **DMSO**
  - **PD-10μM**
  - **PD-20μM**

The graphs depict the relative expression levels of MHC and MEF2C over the course of days 0 and 3, comparing different treatment conditions.
Figure S6

A

Cumulative fraction

Log2(fold_enrichment)

B

C

GM

D4

CDS 32%

ncRNA 10%

3'UTR 50%

5'UTR 8%

CDS 31%

ncRNA 12%

3'UTR 49%

5'UTR 8%