

Protocol for hPSC Differentiation into Skeletal Muscle

Figure 1. Genea Biocells Skeletal Muscle differentiation as per Caron et. Al. 2016.

Reagents:

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-

And

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| Plate/Flask Format | | | | |
|--------------------|--|--|--|--|
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Protocol Index



2.

| Cat # | Description |
|-------|-------------|
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| | |
| | |
| | |

Academic Inquiries-US and Europe:

Japan:

Stage I – Conversion of human PSC to myogenic precursors

1.1. _____

1.1.1.

1.1.2.

1.1.3.

1.1.4.

1.1.5.

1.1.6.

Note: Successful skeletal muscle differentiation has been observed in difficult cell lines plated at densities from 2500 to 10,000 cells/cm²

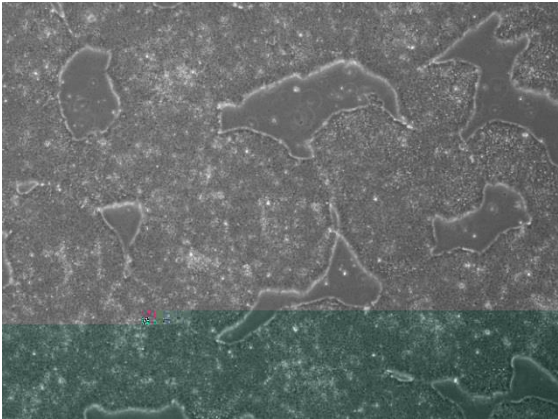

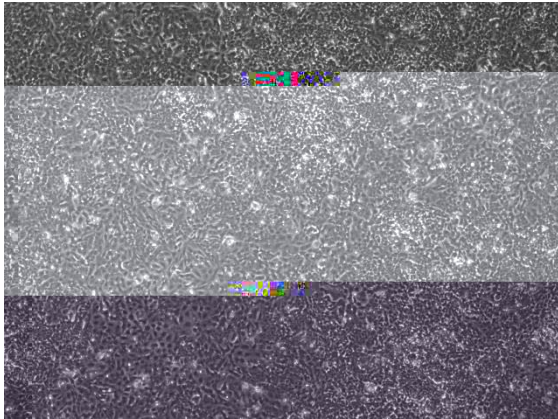
Note: Growth formats smaller than 12 well plates are not recommended for Stage I.

1.1.7.

1.1.8.

1.1.9.

1.2. _____

| | | |
|---|---|--|
|  |  |  |
| | Stage I | Myogenic Precursor |

Stage II – Conversion of Myogenic Precursors to Myoblasts

1.3. _____

1.3.1.

1.3.2.

1.3.3.

1.3.4.

1.3.5.

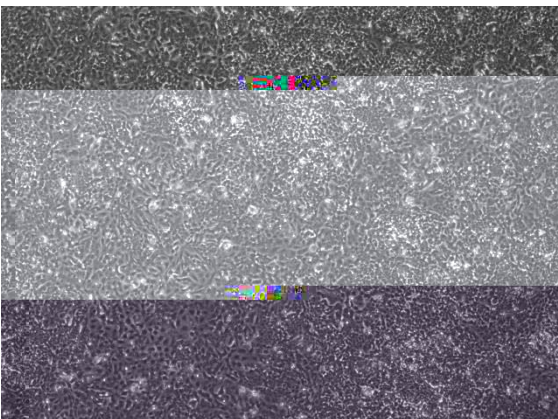

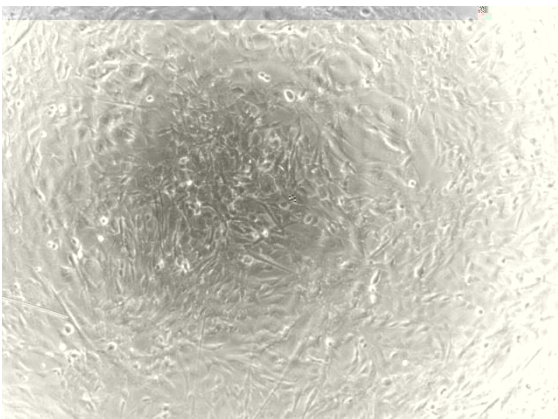
1.3.6.

1.3.7.

1.3.8.

1.3.9.

1.4. _____

| | | |
|--|---|---|
|  |  |  |
| Myogenic Precursor | Stage II | Myoblasts |

Stage III – Differentiation of Myoblasts to post mitotic Myotubes

1.5. _____

1.5.1. _____

1.5.1.1. _____

Note: Myoblasts are not dissociated at this stage; ensure the cells have formed a confluent monolayer to fully differentiate into Myotubes

Note: Use of Myotube/Myotube Fusion Medium will depend on end user assay requirements

1.5.1.2. _____

1.5.2. _____

1.5.2.1. _____

1.5.2.2. _____

1.5.2.3. _____

1.5.2.4. _____

1.5.2.5. _____

1.5.2.6. _____

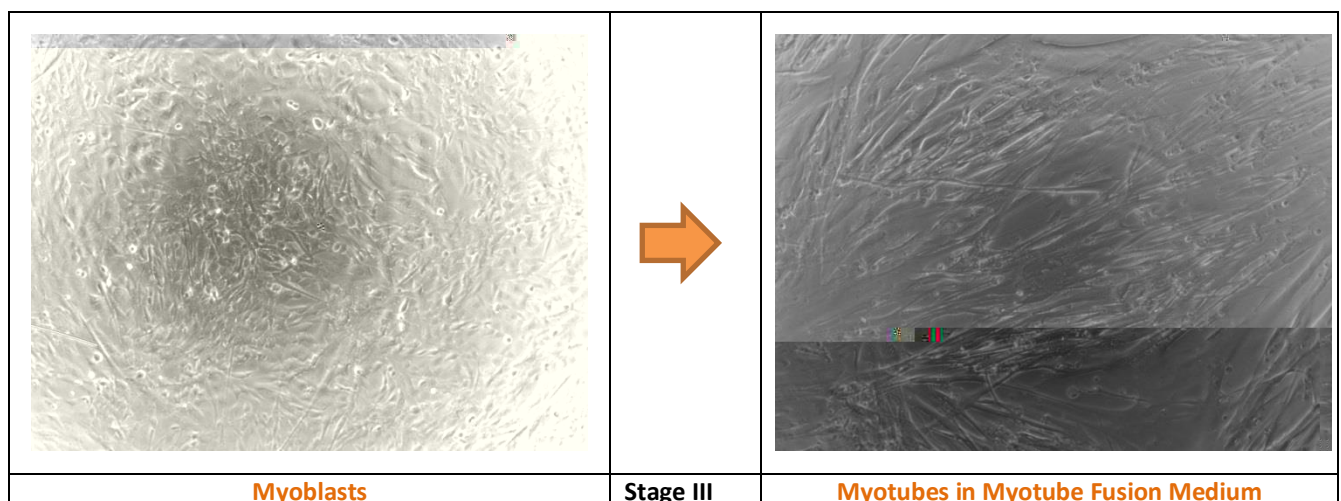
1.5.2.7. _____

1.5.2.8. _____

1.5.2.9. _____

1.5.2.10. _____

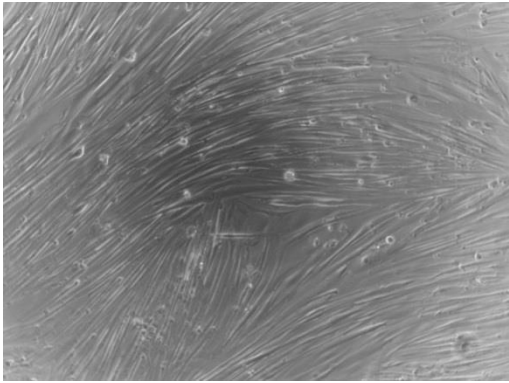
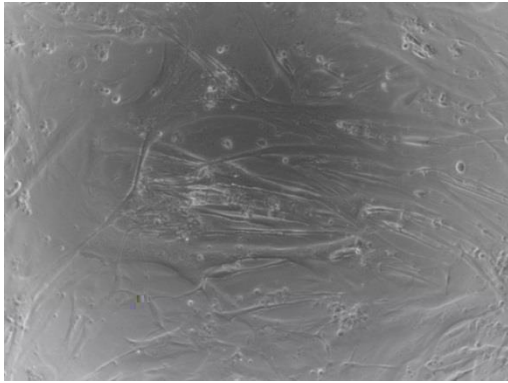
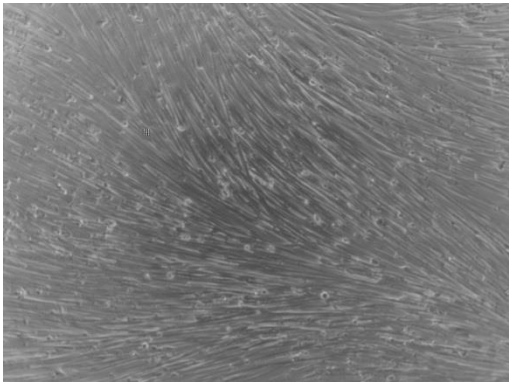
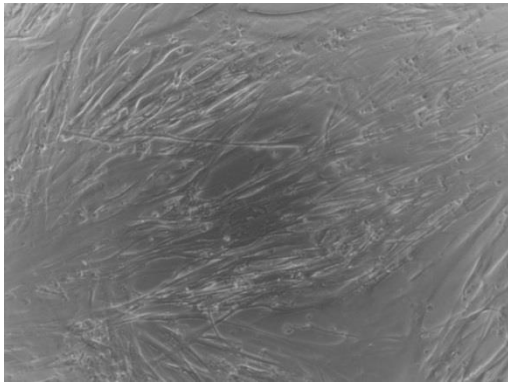
1.5.3. _____

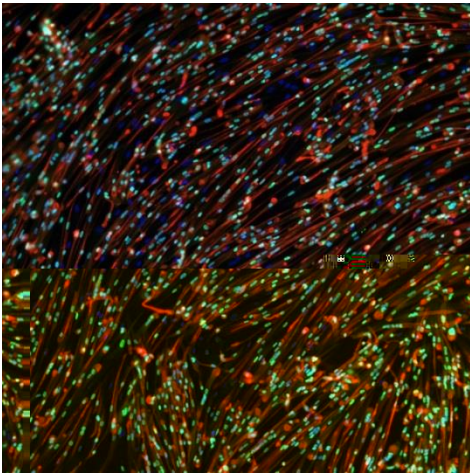
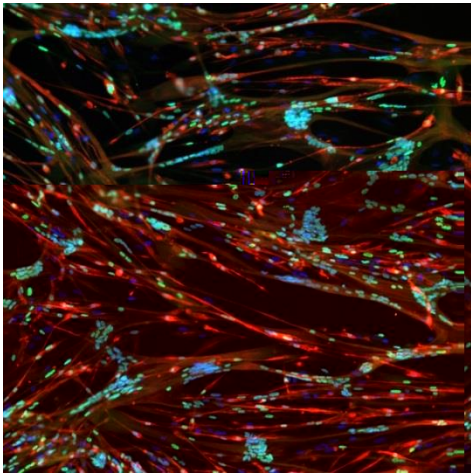


Myoblasts

Stage III

Myotubes in Myotube Fusion Medium

| | | |
|--|--------------------|---|
|  | Cell Line 1 |  |
|  | Cell Line 2 |  |
| Myotubes in SkM. Myotube Medium (SKM-03) | Stage 3 | Myotubes in SkM. Myotube Fusion Medium (SKM-03+) |

| | | |
|---|----------------|--|
|  | |  |
| Myotubes in SkM. Myotube Medium (SKM-03) | Stage 3 | Myotubes in SkM. Myotube Fusion Medium (SKM-03+) |