

## Dopaminergic Differentiation Medium

### Making Dopaminergic Differentiation Complete Medium

Dopaminergic Differentiation complete medium is formulated to differentiate dopaminergic transitioned neural stem cells (DA-NSCs) into a dopaminergic population of mature neurons and support cells. Dopaminergic Differentiation medium contains glutamine but no antibiotics. After all the components are added to the basal medium and filtered to ensure sterility, the media is complete and ready to use to differentiate NSCs into many sub-types of neurons, astrocytes and oligodendrocytes. NSCs differentiate best when cultured in a humidified incubator set at 6% CO<sub>2</sub>, 37°C and oxygen concentrations below 5% O<sub>2</sub>.

1. Dopaminergic Differentiation Medium (Cat. # 21002-250) includes the following components:
  - a. Neural Differentiation Basal Medium
  - b. Dopaminergic Differentiation Supplement Pack includes the following components:

Supplement Component
Neural Differentiation Base Supplement (contains glutamine)
Laminin
BDNF
GDNF
Artemin
Neurtruin
Proprietary Factor 10

### Preparing Dopaminergic Differentiation Medium

1. Warm Neural Differentiation basal medium to room temperature
2. Thaw Neural Differentiation Supplement and growth factors
3. Aseptically add supplements to basal medium in order
  - a. Neural Differentiation Base Supplement - transfer entire contents of the vial then rinse the vial with Neural Differentiation basal medium
  - b. Laminin and growth factors BDNF, GDNF, Artemin, Neurtruin and PF10
4. Antibiotics are optional but may be added. The cells have been tested in media containing 150ul of Gentamicin (Gibco Cat. # 15750-060 50mg/ml) in 250ml media.
5. Filter through 0.22µm filter unit
6. Store Dopaminergic Differentiation complete medium at 4°C in the dark until ready for use
7. Warm Dopaminergic Differentiation complete medium to room temperature immediately before use.
  - a. Do not leave the Dopaminergic Differentiation complete medium in a water-bath for longer than 5 minutes as this may result in degradation of the growth factors and glutamine.
8. Use Dopaminergic Differentiation complete medium within two weeks

**Use Restrictions:** The Products and components of the Products are to be used for RESEARCH PURCHASES ONLY and are not for use in humans or animals. No rights expressed or implied are conveyed by the sale of the Products to make, have made, offer to sell or sell the Products alone or in combination with any other products or to use for commercial purposes without PhoenixSongs' prior written consent.