

**Human Dental Follicle Stem Cells (hDFSC) | 300701**

**General Information**

**Description** Human Dental Follicle Stem Cells (DFSCs, hDFSCs) are a type of Mesenchymal Stem Cell (MSC) derived from the dental follicle, a specialized tissue surrounding the developing tooth. hDFSCs are multipotent and can differentiate into various cell types, including osteoblasts, adipocytes, and chondrocytes. They are characterized by their self-renewal capacity and their ability to migrate and engraft in various tissues. hDFSCs are a type of DFSC that are derived from the dental follicle, a specialized tissue surrounding the developing tooth. They are characterized by their self-renewal capacity and their ability to migrate and engraft in various tissues.

**Organism** Human

**Tissue** Dental follicle

**Characteristics**

**Growth properties** Adherent

**Identification**

**Citation** [Reference] (DFSC, hDFSC) (Cytion 300701)

**Biosafety level** 1

**NCBI\_TaxID** 9606

**Media and Reagents**

**Culture**

**Culture Medium** MEM, w: 2.0 mM L-glutamine, w/o:  $\beta$ -ME, w/o:  $\beta$ -mercaptoethanol, w: 1.0 mM  $\beta$ -mercaptoethanol, w: 2.2g/L insulin

**Supplements** 10% FBS, 2 ng/mL bFGF

**Dissociation Reagent** Trypsin

**Subculturing** Seed cells into T25 flasks with MEM + 10% FBS + 2 ng/mL bFGF. Passage cells into T25 flasks with MEM + 10% FBS + 2 ng/mL bFGF when cells reach 80-90% confluency.

Product sheet

hDFSC | 300701

**Seeding density**  $2 \times 10^4$  cells/cm<sup>2</sup>

**Freeze medium**

90% FBS + 10% DMSO, CM-1 (Cytion 800100)

**Thawing and Culturing Cells**

1. Thaw cells rapidly in a 37°C water bath.
2. Dilute cells into pre-warmed medium.
3. Seed cells into a 37°C incubator.
4. Allow cells to attach to the surface.
5. Change medium after 24 hours.
6. Harvest cells after 3 days.
7. Seed cells into a 10 cm<sup>2</sup> flask.
8. Harvest cells after 10 days.

**Incubation Atmosphere**

37°C, 5% CO<sub>2</sub>

**Flask Coating**

Fluoropolymer-coated, non-adhesive

**Freezing Procedure**

Freeze cells at -78°C

**Shipping Conditions**

Ship cells at -78°C

**Storage Conditions**

Store cells at -150°C for 196 days

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**Sterility**

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