

Match Overview

1	CrossCheck 282 words Jie - fei Shen. "Dedifferentiated fat cells: an alternative ... ource of adult multipotent cells from the adipose tissues	3%
2	Internet 110 words crawled on 13-Mar-2013 www.salk.edu	1%
3	CrossCheck 83 words Jumabay, Medet, Jeremiah H. Moon, Huwate Yeerna, an d Kristina I. Boström. "Effect of Diabetes Mellitus on Ad ...	1%
4	CrossCheck 80 words Puri, Sapna, Alexandra E. Folias, and Matthias Hebrok. " ... Plasticity and Dedifferentiation within the Pancreas: De ...	1%
5	Internet 78 words crawled on 10-Dec-2014 www.science.gov	1%
6	CrossCheck 60 words Taro Matsumoto. "Mature adipocyte-derived dedifferent ... ted fat cells exhibit multilineage potential", Journal of Cel	1%
7	Internet 57 words crawled on 23-Oct-2013 www.ncbi.nlm.nih.gov	1%
8	CrossCheck 56 words Jim Gimble. "Adipose-derived adult stem cells: isolatio ... characterization, and differentiation potential", Cytothera	1%
9	CrossCheck 42 words Wei, Shengjuan, Linsen Zan, Gary J. Hausman, Theodor e P. Rasmussen, Werner G. Bergen, and Michael V. Dod	<1%
10	CrossCheck 39 words Antonella Poloni. "Human Dedifferentiated Adipocytes ... how Similar Properties to Bone Marrow-Derived Mesenc	<1%

39

Name of Journal: *World Journal of Stem Cells*

ESPS Manuscript NO: 16540

Manuscript Type: Review

62

Dedifferentiated fat cells: A cell source for regenerative medicine

Medet Jumabay, Kristina I Boström

Abstract

The identification of an ideal cell source for tissue regeneration remains a challenge in the stem cell field. The ability of progeny cells to differentiate into other cell types is important for the processes of tissue reconstruction and tissue engineering and has clinical, biochemical or molecular implications. The adaptation of stem cells from adipose tissue for use in regenerative medicine has created a new role for adipocytes. Mature adipocytes can easily be isolated from adipose cell suspensions and allowed to dedifferentiate into lipid-free multipotent cells, referred to as dedifferentiated fat (DFAT) cells. Compared to other adult stem cells, the DFAT cells have unique advantages in their abundance, ease of isolation and homogeneity. Under proper condition *in vitro* and *in vivo*, the DFAT cells have exhibited adipogenic, osteogenic, chondrogenic, cardiomyogenic, angiogenic, myogenic, and neurogenic potentials. In this review, we first discuss the phenomena of dedifferentiation and transdifferentiation of cells, and then dedifferentiation of adipocytes in particular. Understanding the dedifferentiation process itself may contribute to our knowledge of normal growth processes, as well as mechanisms of disease. Second, we highlight new developments in DFAT cell culture and summarize the current understanding of DFAT cell properties. The unique features of DFAT cells are promising for clinical applications such as tissue



[网页](#) [新闻](#) [图片](#) [地图](#) [购物](#) [更多 ▾](#) [搜索工具](#)

找到约 19,700 条结果 (用时 0.72 秒)

Google 学术: Dedifferentiated fat cells: A cell source for regenerative medicine

Adipose-derived stem cells for regenerative medicine - Gimble - 被引用次数: 1345

... cells from human adipose tissue: implications for cell- ... - Zuk - 被引用次数: 5763

Mature adipocyte - derived dedifferentiated fat cells ... - Matsumoto - 被引用次数: 192

Dedifferentiated fat cells: an alternative source of adult ...

www.ncbi.nlm.nih.gov/pubmed/21789960 ▾ [翻译此页](#)

作者: JF Shen - 2011 - 被引用次数: 54 - 相关文章

Dedifferentiated fat cells: an alternative source of adult multipotent cells from the ...

When adipose-derived stem cells (ASCs) are retrieved from the stromal vascular ... cell suspension and dedifferentiated into lipid-free fibroblast-like cells, ...

Phenotypic and Functional Properties of Porcine ...

www.hindawi.com/journals/bmri/2015/673651/ ▾ [翻译此页](#)

作者: X Peng - 2015 - 相关文章

2015年4月30日 - Therefore, porcine DFAT cells may be a novel model of stem cells for ... cells by ceiling culture, named dedifferentiated fat (DFAT) cells [9, 10]. ... may be a novel adult stem cell source for tissue engineering and cell therapy ...

Dedifferentiated fat cells: an alternative source of ... - PubFacts

www.pubfacts.com/.../Dedifferentiated-fat-cells:-an-alternative-... ▾ [翻译此页](#)

Dedifferentiated fat cells: an alternative source of adult multipotent cells from the adipose ... cell suspension and dedifferentiated into lipid-free fibroblast-like cells, ... Compared with ASCs and other adult stem cells, DFAT cells showed unique ...

Systematic implantation of dedifferentiated fat cells ...

www.stemcellres.com/content/6/1/80 ▾ [翻译此页](#)

作者: T Maruyama - 2015 - 相关文章

2015年4月16日 - Thus, mesenchymal stem cells (MSCs) have arisen to become a candidate cell source in regenerative medicine for kidney diseases.

[网页](#) [地图](#) [新闻](#) [图片](#) [视频](#) [更多 ▾](#) [搜索工具](#)

找到约 135,000 条结果 (用时 0.54 秒)

Google 学术: Dedifferentiated fat cells: A cell source for regenerative medicine

Adipose-derived stem cells for regenerative medicine - Gimble - 被引用次数: 1360

... cells from human adipose tissue: implications for cell- ... - Zuk - 被引用次数: 5797

Mature adipocyte-derived dedifferentiated fat cells ... - Matsumoto - 被引用次数: 194

Dedifferentiated fat cells: an alternative source of adult ...

www.ncbi.nlm.nih.gov/pubmed/21789960 ▾ 翻译此页

作者: JF Shen - 2011 - 被引用次数: 54 - 相关文章

Dedifferentiated fat cells: an alternative source of adult multipotent cells from the ... When adipose-derived stem cells (ASCs) are retrieved from the stromal ... culture methods of DFAT cells are introduced and the current profiles of their cellular ...

Dedifferentiated fat cells: an alternative source of ... - GCBI

<https://www.gcbi.com.cn/gclib/html/pubmed/detail/21789960> ▾ 翻译此页

Dedifferentiated fat cells: an alternative source of adult multipotent cells from the ... When adipose-derived stem cells (ASCs) are retrieved from the stromal ... culture methods of DFAT cells are introduced and the current profiles of their cellular ...

Phenotypic and Functional Properties of Porcine ...

www.hindawi.com/journals/bmri/2015/673651/ ▾ 翻译此页

作者: X Peng - 2015 - 相关文章

2015年4月30日 - Therefore, porcine DFAT cells may be a novel model of stem cells for ... cells by ceiling culture, named dedifferentiated fat (DFAT) cells [9, 10]. ... may be a novel adult stem cell source for tissue engineering and cell therapy ...