



US010918695B2

(12) **United States Patent**
Sharma et al.

(10) **Patent No.:** **US 10,918,695 B2**
(45) **Date of Patent:** **Feb. 16, 2021**

(54) **USE OF JACK BEAN LECTIN FOR INCREASING THE ABUNDANCE OF HEMATOPOIETIC STEM CELLS AND PROGENITOR CELLS IN BONE MARROW AND/OR EPIDERMAL STEM CELLS IN SKIN IN VIVO**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 31 days.

(21) Appl. No.: **16/239,280**

(22) Filed: **Jan. 3, 2019**

(65) **Prior Publication Data**

US 2020/021512 A1 Jul. 9, 2020

(51) **Int. Cl.**

A61K 36/48 (2006.01)
A61K 38/16 (2006.01)
A61K 9/00 (2006.01)

(52) **U.S. Cl.**

CPC **A61K 38/168** (2013.01); **A61K 9/0019** (2013.01); **A61K 36/48** (2013.01)

(58) **Field of Classification Search**

CPC **A61K 38/00**; **A61K 38/168**; **A61K 36/48**; **A61K 9/0019**; **C07K 14/415**; **C07K 14/42**
See application file for complete search history.

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(57) **ABSTRACT**

A method of treatment of disease condition resulting from deficiency of hematopoietic stem and progenitor cells and/or epidermal stem cells in skin comprising: administering to the subject suffering from said disease conditions, an effective amount of Jack bean lectin or a pharmaceutically acceptable salt thereof for increasing the abundance of hematopoietic stem cells and progenitor cells in bone marrow and/or epidermal stem cells in skin in vivo. Method of treating said conditions in a subject involves administering a single injection of lectin in a dose range of 0.5-2.0 mg/kg body weight to mouse leading to 2.815 to 3.55 fold increase in the abundance of epidermal stem cells in skin and a dose range of 8.0-10.0 mg/Kg body weight to a mouse leading to 2.36 to 6.67-fold increase in the abundance of hematopoietic stem and progenitor cells in bone marrow.

6 Claims, 3 Drawing Sheets

Specification includes a Sequence Listing.