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(54) **PHARMACEUTICAL COMPOSITION COMPRISING STEM CELLS TREATED WITH NOD2 AGONIST OR CULTURE THEREOF FOR PREVENTION AND TREATMENT OF IMMUNE DISORDERS AND INFLAMMATORY DISEASES**

(75) Inventors: **Kyung Sun Kang**, Seoul (KR); **Hyung Sik Kim**, Seoul (KR)

(73) Assignee: **KANG STEM BIOTECH CO., LTD.**, Seoul (KR)

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(58) **Field of Classification Search**
None
See application file for complete search history.

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Primary Examiner — Ralph Gitomer

Assistant Examiner — Trent Clarke

(74) *Attorney, Agent, or Firm* — Edwin S. Flores; Chainey P Singleton; Chalker Flores, LLP

(57) **ABSTRACT**

The present invention relates to a pharmaceutical composition for the prevention or treatment of immune disorders and inflammatory diseases, comprising stem cells that are generated by culturing stem cells expression Nucleotide-binding Oligomerization Domain protein 2 (NOD2) with a NOD2 agonist or a culture thereof. More particularly, the present invention relates to a method for suppressing immune responses or inflammatory responses of a subject, comprising the step of administering the pharmaceutical composition, the stem cells or culture thereof to the subject, a method for preparing an immunosuppressive drug or an anti-inflammatory drug using the stem cells or culture thereof, a method for preparing PGE₂ or TGF-β1 comprising the step of culturing NOD2-expressing stem cells in culture medium with a NOD2 agonist, a graft comprising stem cells expressing NOD2 and the NOD2 agonist, a method for preparing the graft, a composite comprising stem cells expressing NOD2 and the NOD2 agonist, and a culture generated by culturing the NOD2-expressing stem cells with a NOD2 agonist.

7 Claims, 30 Drawing Sheets

