

**Docket #:** S01-184

# **Composition and Method to Purify Active Wnt Proteins for Stem Cell Proliferation**

## **Applications**

- Biochemical characterization of Wnt signaling
- Maintain and expand stem cell populations for research purposes
- Potential broad applications of use of the purified Wnt proteins in fields such as transplantation and tissue regeneration

## **Advantages**

- First effective method to purify Wnt proteins - full purification never done before
- First time useful amounts of pure, biologically active Wnt proteins available
- Allows maintenance of stem cell cultures - not possible before
- Allows for more effective transplantation and tissue regeneration

## **Publications**

- Reya T et al. [A role for Wnt signalling in self-renewal of haematopoietic stem cells](#). Nature. 2003 May 22;423(6938):409-14.
- Willert K et al. [Wnt proteins are lipid-modified and can act as stem cell growth factors](#). Nature. 2003 May 22;423(6938):448-52.
- US patent 7,153,832: [Compositions of active Wnt protein](#)
- US patent 7,335,643: [Compositions of active Wnt protein](#)
- US patent application 12/480,550: [Compositions of active Wnt protein](#)

- **related publication:** Couzin J. [Purified Signaling Protein Stimulates Stem Cell Proliferation](#). Science. 2003 May 2;300(5620):722.

## Patents

- Published Application: [WO2004091647](#)
- Published Application: [20040248803](#)
- Published Application: [20070105776](#)
- Published Application: [20070269890](#)
- Published Application: [20090275134](#)
- Published Application: [20140308744](#)
- Published Application: [20150344846](#)
- Published Application: [20160097031](#)
- Published Application: [20180002661](#)

## Innovators

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