

Novel marker discovered for stem cells derived from human umbilical cord blood

April 17 2014



©2014, Mary Ann Liebert, Inc., publishers

The development of stem cell therapies to cure a variety of diseases depends on the ability to characterize stem cell populations based on cell surface markers. Researchers from the Finnish Red Cross have discovered a new marker that is highly expressed in a type of stem cells

derived from human umbilical cord blood, which they describe in an article in *BioResearch Open Access*.

Heli Suila and colleagues, Finnish Red Cross Blood Service, Helsinki, Finland present evidence to show that the glycan O-GLcNAc, is present on the surface of [stem cells](#) and is part of a stem cell-specific surface signature. In the article "[Extracellular O-Linked N-Acetylglucosamine Is Enriched in Stem Cells Derived from Human Umbilical Cord Blood](#)" the authors suggest that the glycan plays a crucial role in a cell signaling pathway that regulates embryonic development.

"This work is particularly interesting as epidermal growth factor domains are found on the Notch receptors, suggesting that these novel glycans may be involved in Notch receptor signaling pathways in stem cells," says *BioResearch Open Access* Editor Jane Taylor, PhD, MRC Centre for Regenerative Medicine, University of Edinburgh, Scotland.

More information: The article is available free on the [BioResearch Open Access website](#).

Provided by Mary Ann Liebert, Inc

Citation: Novel marker discovered for stem cells derived from human umbilical cord blood (2014, April 17) retrieved 27 April 2024 from <https://medicalxpress.com/news/2014-04-marker-stem-cells-derived-human.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.
