MedicalXpress

Marker of Ewing sarcoma: Potential new drug target?

February 8 2010

Ewing sarcoma (EWS) is a bone tumor of unknown cellular origin that affects children and young adults.

The protein CD99 is highly expressed in most cases of EWS, but its function in the disease is unknown. Now, Katia Scotlandi and colleagues, at SSN Emilia Romagna Istituto Ortopedico Rizzoli IRCCS, Bologna, Italy, have identified a crucial role for CD99 in the development of EWS and suggest that targeting CD99 or its downstream molecular pathway may be a new therapeutic approach for EWS.

In the study, decreasing CD99 expression in human EWS cell lines reduced their ability to form tumors xenografted into mice. In vitro, it increased expression of H-neurofilament, a marker of neuronal differentiation. Consistent with this, an inverse correlation between CD99 expression and H-neurofilament expression, neural differentiation, and oncogenic transformation was observed in patient-derived EWS cells.

The authors therefore conclude that CD99 prevents neural differentiation and suggest that blocking it might provide a new approach to treating EWS.

More information: CD99 inhibits neural differentiation of human Ewing sarcoma cells and thereby contributes to oncogenesis. View this article at: www.jci.org/articles/view/3666 … 24e370e9a7cd8f56b36b

Medical Xpress

Provided by Journal of Clinical Investigation

Citation: Marker of Ewing sarcoma: Potential new drug target? (2010, February 8) retrieved 9 April 2024 from
https://medicalxpress.com/news/2010-02-marker-ewing-sarcoma-potential-drug.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.