Scientists find cancer cell defense method

October 5 2005

A Seoul, South Korea, research team says it's identified the defense mechanism used by cancer cells to fight therapeutic chemicals.

Team leader Kim Kun-hong of Yonsei University told the Korea Times the discovery that enzyme protein kinase CK2 makes cancer cells resistant to cancer-specific therapeutic chemicals, such as "Trail," is a step toward developing effective treatments for the disease.

Kim said the enzyme influences a protein called procaspase-2 to become phosphate, which keeps the cells from dying and makes them resistant to medication.

However, when Trail was injected in the cancer cells with certain chemical substances the cells became sensitive to Trail and entered the normal death-inducing process.

The researchers tested 31 types of cancer cells and found that by suppressing PKCK2, Trail successfully killed the cancer cells in all the 31 types, regardless of the developmental stage of the cancer cell, Kim told the Korea Times.

The research appears in the online edition of the journal of the European Molecular Biology Organization.

Copyright 2005 by United Press International

Citation: Scientists find cancer cell defense method (2005, October 5) retrieved 25 April 2024 from https://phys.org/news/2005-10-scientists-cancer-cell-defense-method.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.