

Test for hormone-disrupting chemicals gets global seal of approval

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A test for hormone-disrupting pollutants, originally developed at the University of California, Davis, has been approved as an international standard by the Organization of Economic Cooperation and Development as well as by the U.S. government.

"Endocrine disruptors" are chemicals that interfere with the action of hormones on cells. There has been growing concern that such chemicals, from a wide variety of products, might have an impact on both [human health](#) and the environment.

Hormones such as estrogen act on cells by triggering a receptor on the [cell surface](#), setting off a chain of events inside the cell. The new test uses a cell line, BG1Luc4e2, which produces a glowing firefly protein called luciferase when exposed to estrogens or similar chemicals.

The test was originally created by Professor Michael Denison and colleagues at the UC Davis Department of Environmental Toxicology. It has been validated by the National Toxicology Program at the U.S. Department of Health and Human Services and by the U.S. [Environmental Protection Agency](#), and now by the OECD.

The test is licensed to users through UC Davis, in collaboration with UC San Diego and Promega, Inc. of Madison, Wisc., and which own patents on some components of the test. Typical customers are companies that carry out environmental testing for clients.

More information: OECD Performance standards for test (pdf)
[www.oecd.org/env/ehs/testing/B ... rformStds_Antagonist
%20for%20publication%206%20November%202012.pdf](http://www.oecd.org/env/ehs/testing/B...rformStds_Antagonist%20for%20publication%206%20November%202012.pdf)

Provided by UC Davis

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