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Novel and Specific Inhibitors of p21

Tech ID: 22303 / UC Case 2012-486-0

ABSTRACT

Small molecule inhibitors of the cyclin kinase inhibitor, p21, specifically affect p21 levels and can potentially be used in treating cancer.

FULL DESCRIPTION

Cyclin kinase inhibitor p21 promotes cell survival by preventing the apoptosis of cells. Thus, this protein is the cancer cell's method of defeating attempts to kill it, as by chemotherapy, a situation which is clearly harmful for the cancer patient.

Using drug design, researchers at University of California have discovered several specific inhibitors of p21 that are more stable and more effective than the previously discovered small molecule p21 inhibitors. Inhibiting the levels of p21 diminishes its anti-apoptotic effect on cells and makes cells more amenable to cell death.

APPLICATIONS

- ▶ Sensitizers of chemotherapy in kidney as well as other cancers
- ▶ Increase the ability of conventional chemotherapy treatment

FEATURES/BENEFITS

- ▶ Interferes with cell death
- ▶ Small molecule
- ▶ Stability
- ▶ Oral delivery

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	10,449,182	10/22/2019	2012-486

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OTHER INFORMATION

KEYWORDS

p21 inhibitors, cancer therapy, small molecule cancer therapy, kidney cancer, cancer

CATEGORIZED AS

- ▶ **Medical**
 - ▶ Disease: Cancer
 - ▶ Therapeutics

RELATED CASES

2012-486-0

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- ▶ Antibodies for Pseudomonas (P.) aeruginosa
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- ▶ Antibodies: Triazine Herbicide Pabs
- ▶ Optimized Non-Addictive Biologics Targeting Sodium Channels Involved In Pain Signaling
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