Fermented Wheat Germ Extract And Its Purified Low Molecular Weights Proteins For Treatment Of Lung Cancer

Tech ID: 23913 / UC Case 2009-696-0

ABSTRACT

Researchers at the University of California, Davis have demonstrated biologic activities of Fermented wheat germ extract (FWGE) against lung cancer cells in tissue culture and in mice.

FULL DESCRIPTION

Lung cancer is one of the most common cancers and is the leading cause of cancer death in the United States. Fermented wheat germ extract (FWGE) has purported health benefits and anti-cancer properties. However, the anti-cancer activities of FWGE in preclinical models and in humans have not been rigorously studied and the active ingredient(s) have yet to be identified. There is an unmet need for treatment of cancers refractory to traditional chemotherapy. In addition, there is no data assessing its efficacy against lung cancer *in vitro* or *in vivo*.

Researchers at the University of California, Davis have isolated a mixture of low molecular weight fraction of proteins (LAP), consisting of 19 identifiable proteins. Furthermore, UC Davis researchers have demonstrated that fractionated FWGE is cytotoxic to human lung cancer *in vitro* by induction of apoptosis. FWGE also retards the growth of lung cancer xenograft in nude mice. The LAP, on a weight basis, is much more potent than FWGE itself in inhibiting growth of lung cancer cells.

APPLICATIONS

- Treat patients with various forms of cancers, including lung cancer

FEATURES/BENEFITS

- Purified active ingredient(s)
- Compounded ingredients in pill form
- Oral delivery

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	9,480,725	11/01/2016	2009-696

ADDITIONAL TECHNOLOGIES BY THESE INVENTORS

- Bispecific and Trispecific T-cell Engager Antibodies

CONTACT

Raj Gururajan
rgururajan@ucdavis.edu
tel: 530-754-7637.

INTRODUCING
UC TechAlerts
New technology matches delivered to your email at your preferred schedule
SEARCH SAVE SEARCH
Learn More

INVENTORS

- Lau, Derick HM
- O'Donnell, Robert T.
- Tuscano, Joseph M.

OTHER INFORMATION

KEYWORDS

fermented wheat germ extract, cancer, oncology, natural treatment, FWGE, low molecular weight fractio of proteins, LAP

CATEGORIZED AS

- **Agriculture & Animal Science**
  - Nutraceuticals
- **Biotechnology**
  - Food
  - Health
- **Medical**
  - Disease: Cancer
  - Therapeutics

RELATED CASES

2009-696-0

© 2014 - 2017, The Regents of the University of California
Terms of use
Privacy Notice

Davis,CA 95616

https://research.ucdavis.edu/technology-transfer/

Fax: 530.754.7620