Amide Inhibitors of Human Secreted Phospholipase A2

Tech ID: 19410 / UC Case 2009-002-0

BACKGROUND

Recent studies have revealed an important role for the enzyme phospholipase A2 (PLA2) in various aspects of inflammation in the peripheral and central nervous system. PLA2 consists of a superfamily of enzymes involved in the turnover of phospholipids; their metabolic products can induce both inflammation and demyelination. Therefore, PLA2 enzymes are good candidates as drug targets for the treatment.

TECHNOLOGY DESCRIPTION

UC San Diego researchers have developed novel amide compounds for the treatment of inflammation. The new molecules are potent inhibitors of secreted PLA2 (sPLA2).

ADVANTAGES

- Potential drugs for the treatment of MS and spinal cord injuries.
- High degree of specificity respectively for the sPLA2.

STATE OF DEVELOPMENT

This technology is offered exclusively or nonexclusively in the U.S. and/or worldwide territories. A commercial sponsor for potential future research is sought.

RELATED MATERIALS

- Antonopoulou, G., Barbayianni, E., Magrioti, V., Cotton, N., Stephens, D., Constantinou-Kokotou,V., Dennis, E.A. and Kokotos, G., Structure-Activity Relationships of Natural and Non-Natural Amino Acid-Based Amide and 2-Oxoamide Inhibitors of Human Phospholipase A2 Enzymes, Bioorg.Med.Chem., 16, 10257-10269 (2008).

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	8,759,392	06/24/2014	2009-002

RELATED TECHNOLOGIES

- Selective Phospholipase A2 Inhibitors of Neurological Diseases

ADDITIONAL TECHNOLOGIES BY THESE INVENTORS

- Selective Phospholipase A2 Inhibitors of Neurological Diseases

CONTACT

University of California, San Diego
Office of Innovation and Commercialization
innovation@ucsd.edu
tel: 858.534.5815.

INVENTORS

- Dennis, Edward A.

OTHER INFORMATION

KEYWORDS

therapy, drug, phospholipase A2, PLA2, inhibitor, inflammation, demyelination

CATEGORIZED AS

- **Medical**
  - Disease: Central Nervous System
  - New Chemical Entities, Drug Leads

RELATED CASES

2009-002-0