



Volume 36, Number 6, December 2008

### BIOORGANIC CHEMISTRY

www.elsevier.com/locate/bioorg

### **Contents**

Abstracted/indexed in SCOPUS®. Full text available on ScienceDirect®.

## The putative coenzyme $B_{12}$ -dependent methylmalonyl-CoA mutase from potatoes is a phosphatase

pp 261-264

Csaba Paizs, Tanja Diemer and János Rétey \*

### Emollient, humectant, and fluorescent $\alpha,\beta$ -unsaturated thiol esters for long-acting skin applications

pp 265-270

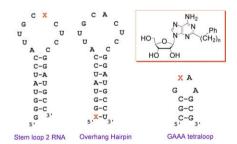
Carmen Robinson, Rosemarie F. Hartman and Seth D. Rose \*

 $\alpha$ , $\beta$ -Unsaturated thiol esters are subject to Michael-type addition by nucleophiles such as thiolates. Suitably substituted compounds may have utility as long-acting emollients (R = hydrophobic) or humectants (R = hydrophilic) by reaction with thiols in skin proteins.

#### Characterization of two adenosine analogs as fluorescence probes in RNA

pp 271-277

Ying Zhao, Joseph L. Knee \* and Anne M. Baranger \*



### DNA-binding and photocleavage properties of cationic porphyrin–anthraquinone hybrids with different lengths of links

pp 278–287

Ping Zhao, Lian-Cai Xu, Jin-Wang Huang ,\* Bo Fu, Han-Cheng Yu, Wei-Hong Zhang, Jian Chen, Jun-Hua Yao and Liang-Nian Ji

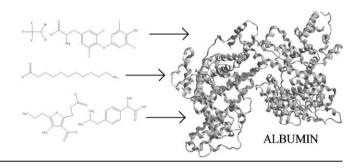
Cationic porphyrin–anthraquinone hybrids with different lengths of linkage were synthesized. Hybrids with longer linkages may be sterically appropriate to bis-intercalate CT DNA.

$$\begin{array}{c} \mathsf{CH_3} \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{CH_3} \\ \mathsf{N} \\ \mathsf{CH_3} \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{CH_3} \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{CH_3} \\ \mathsf{N} \\ \mathsf$$

### Computational study of ligand binding to protein receptors

pp 288-294

Paul Wembridge, Heather Robinson and Igor Novak \*



### Alanine-dependent reactions of 5'-deoxypyridoxal in water

pp 295-298

Maybelle K. Go and John P. Richard \*

Alanine-catalyzed dimerization of pyridoxal in water.

#### Fluorescent isotope-coded affinity tag (FCAT). I. Design and synthesis

pp 299-311

Zuly Rivera-Monroy, Guenther K. Bonn and András Guttman \*

Fluorescent isotope-coded affinity tag (FCAT) is new class of reagent to label cysteine containing proteins and/or peptides, providing a tool for quantitative proteomics with the option of absolute quantification. In this paper, we describe the design, synthesis characterization and reactivity of FCAT reagent.

# Mechanistic studies on PseB of pseudaminic acid biosynthesis: A UDP-N-acetylglucosamine 5-inverting 4,6-dehydratase

pp 312-320

James P. Morrison, Ian C. Schoenhofen and Martin E. Tanner \*