

## FOREWORD

Jadranka Varljen and Zrinka Kovarik

*Croat. Chem. Acta* 81 (2008) IX

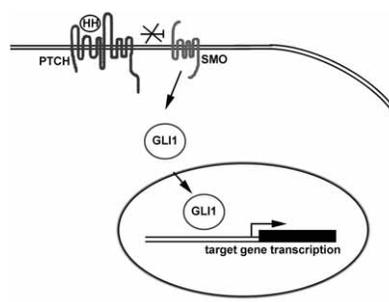
## REVIEWS

CCA-3206

### Hh-Gli Signaling Pathway Functions and Its Therapeutic Potential in Cancer

Sonja Levanat, Maja Čretnik, and Vesna Musani

*Croat. Chem. Acta* 81 (2008) 1–5

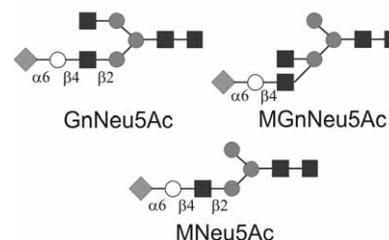


CCA-3207

### The Glycosylation Capacity of Insect Cells

Dubravko Rendić, Iain B. H. Wilson, and Katharina Paschinger

*Croat. Chem. Acta* 81 (2008) 7–21

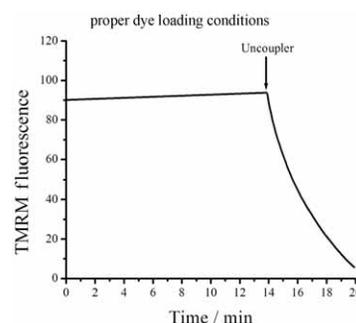


CCA-3208

### Biomarkers for Drug Discovery: Important Aspects of *in vitro* Assay Design for HTS and HCS Bioassays

William A. Irwin, Dubravko Jelić, and Roberto Antolović

*Croat. Chem. Acta* 81 (2008) 23–30

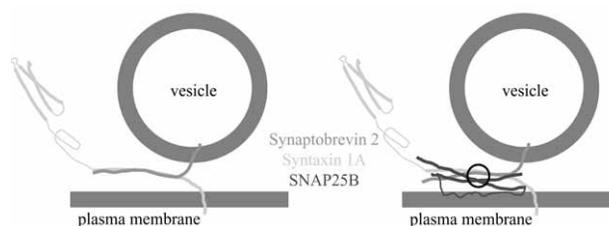


CCA-3209

### Single Molecule Probing of Exocytotic Protein Interactions Using Force Spectroscopy

Vedrana Montana, Wei Liu, Umar Mohideen, and Vladimir Parpura

*Croat. Chem. Acta* 81 (2008) 31–40



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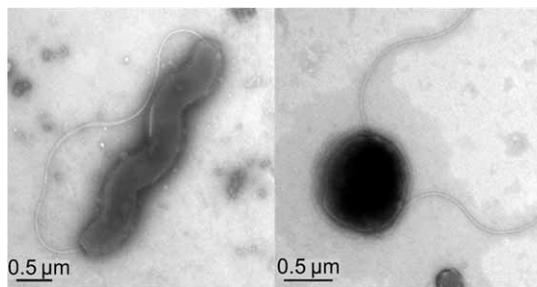
**ORIGINAL SCIENTIFIC PAPER**


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CCA-3210

**Effects of Low Temperature, Starvation and Oxidative Stress on the Physiology of *Campylobacter jejuni* Cells**

Anja Klančnik, Tina Zorman, and Sonja Smole Možina

*Croat. Chem. Acta* **81** (2008) 41–46

CCA-3211

**In vitro Evaluation of Aldoxime Interactions with Human Acetylcholinesterase**

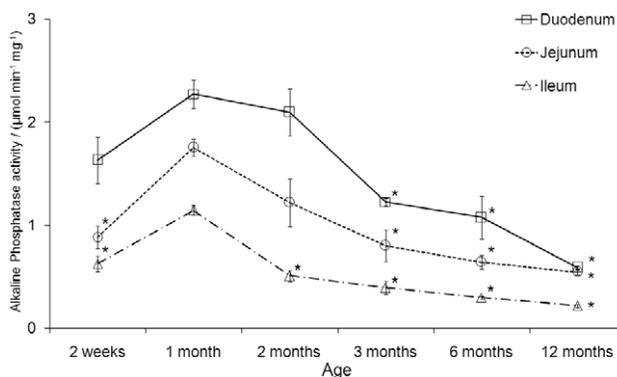
Zrinka Kovarik, Maja Čalić, Anita Bosak, Goran Šinko, and Dubravko Jelić

*Croat. Chem. Acta* **81** (2008) 47–57

CCA-3212

**Age Dependent Changes in Activity of Intestinal Disaccharidases and Alkaline Phosphatase Activity in CD26 Deficient Mice**

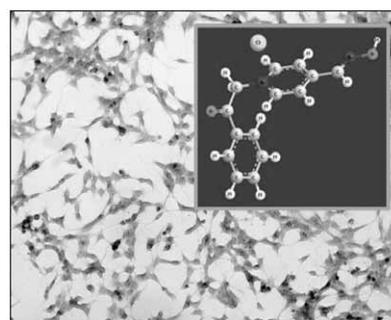
Lara Batičić, Dijana Detel, and Jadranka Varljen

*Croat. Chem. Acta* **81** (2008) 59–65

CCA-3213

**Cytotoxicity of Selected Pyridinium Oximes in Human SH-SY5Y Neuroblastoma Cell Line**

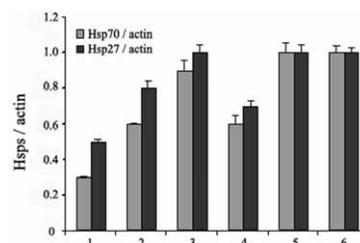
Svjetlana Kalanj Bognar, Blaženka Foretić, Željka Vukelić, Tonko Gulin, and Davor Ježek

*Croat. Chem. Acta* **81** (2008) 67–71

CCA-3214

**Reduction in Peripheral Blood Leukocyte Heat Shock Proteins 27 and 70 Expression in Chronic Obstructive Pulmonary Disease**

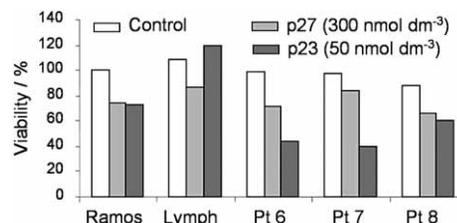
Lada Rumora, Lara Milevoj, Sanja Popović-Grle, Karmela Barišić, Tihana Žanić Grubišić, and Ivana Čepelak

*Croat. Chem. Acta* **81** (2008) 73–80

CCA-3215

**Transduction of p27 to Induce Apoptosis in Tumor Cells**

Mira Grdiša, Ana-Matea Mikecin, and Martina Grdiša

*Croat. Chem. Acta* **81** (2008) 81–87

CCA-3216

**Thylakoid System Disassembly during Bleaching of Aurea Mutants of Maple *Acer negundo* Hassk. var. *Odessanum***

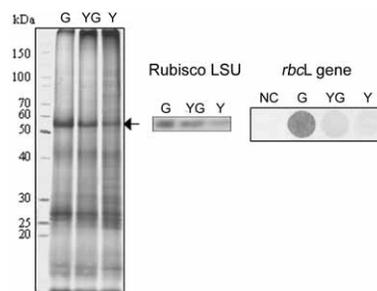
Hrvoje Fulgosi, Snježana Jurić, Hrvoje Lepeduš, Kroatia Hazler-Pilepić, Tatjana Prebeg, and Nikola Ljubešić

*Croat. Chem. Acta* **81** (2008) 89–95

CCA-3217

**Photosynthetic Electron Transport and Superoxide Dismutase Activity during Natural Senescence of Maple Leaves**

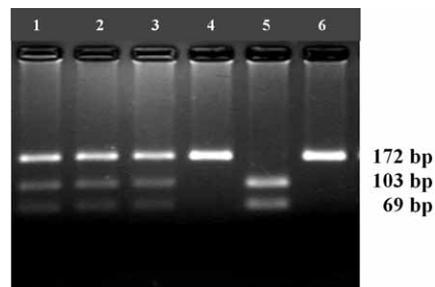
Hrvoje Lepeduš, Ivna Štolfa, Sandra Radić, Mirna Ćurković Perica, Branka Pevalek-Kozlina, and Vera Cesar

*Croat. Chem. Acta* **81** (2008) 97–103

CCA-3218

**Genetic Frequencies of Paraoxonase 1 Gene Polymorphisms in Croatian Population**

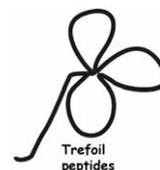
Marija Grdić, Karmela Barišić, Lada Rumora, Ilza Salamunić, Milena Tadijanović, Tihana Žanić Grubišić, Renata Pšikalová, Zlata Flegar-Meštrić, and Dubravka Juretić

*Croat. Chem. Acta* **81** (2008) 105–111

CCA-3219

**Novel Expression Patterns for Trefoil Peptides: Presence of Tff2 and Tff3 in Rodent Cochlea**

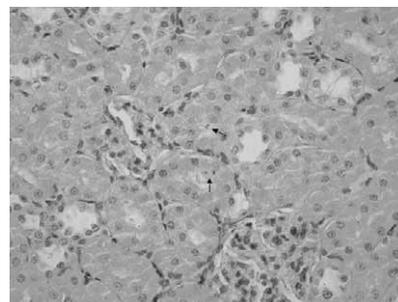
Maria Lubka, Carsten M. Pusch, Nikolaus Blin, and Mirela Baus-Lončar

*Croat. Chem. Acta* **81** (2008) 113–117

CCA-3220

**The Effect of a Single Dose of Fumonisin B<sub>1</sub> on Rat Kidney**

Maja Peraica, Danica Ljubanović, Davor Želježić, and Ana-Marija Domijan

*Croat. Chem. Acta* **81** (2008) 119–124

CCA-3221

### Frequency of Galactose-1-phosphate Uridyl Transferase Gene Mutations in Healthy Population of Croatia

Karmela Barišić, Lada Rumora, Marija Grdić,  
and Dubravka Juretić

*Croat. Chem. Acta* **81** (2008) 125–130

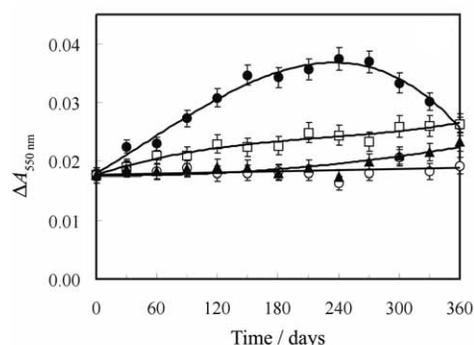
| Mutation        | Frequency / %  |                 |
|-----------------|----------------|-----------------|
|                 | Normal alleles | Mutated alleles |
| Q188R           | 99.8           | 0.2             |
| N314D (D1 + D2) | 92.5           | 7.5             |
| IVS5-24G>A      | 95.7           | 4.3             |
| Duarte-2        | 96.4           | 3.6             |
| Duarte-1        | 96.2           | 3.8             |
| K285N           | 100.0          | 0.0             |

CCA-3222

### Accumulation of Amadori and Maillard Products in Wheat Seeds Aged under Different Storage Conditions

Ivica Strelec, Žaneta Ugarčić-Hardi, and Mario Hlevnjak

*Croat. Chem. Acta* **81** (2008) 131–137

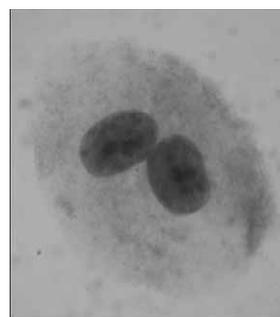


CCA-3223

### Genotoxicity of Fumonisin B<sub>1</sub>, Beauvericin and Ochratoxin A in Porcine Kidney PK15 Cells: Effects of Individual and Combined Treatment

Maja Šegvić Klarić, Stjepan Pepeljnjak, and Ružica Rozgaj

*Croat. Chem. Acta* **81** (2008) 139–146

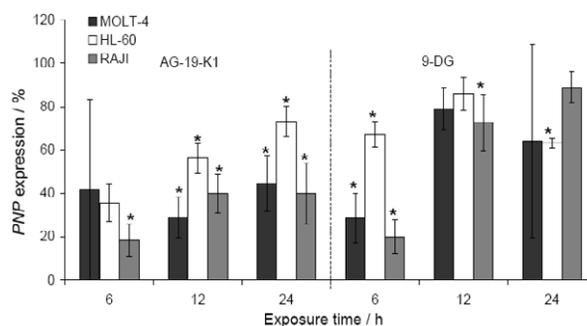


CCA-3224

### 9-Deazaguanine and Its Methyl Derivatives: Synthesis, Antitumor Activity *in vitro* and Effects on Purine Nucleoside Phosphorylase Gene Expression

Mirjana Suver, Biserka Žinić, Tomislav Portada,  
Agnieszka Bzowska, and Ljubica Glavaš-Obrovac

*Croat. Chem. Acta* **81** (2008) 147–156

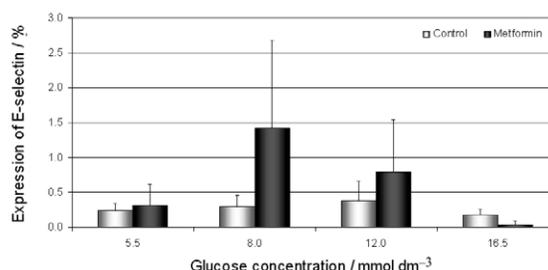


CCA-3225

### Effects of Hyperglycemia and Metformin on Expression of Adhesion Molecules on Human Aortic Endothelial Cells

Tatjana Bačun, Tatjana Belovari, Mirjana Suver,  
Blaženka Dobrošević, and Ljubica Glavaš-Obrovac

*Croat. Chem. Acta* **81** (2008) 157–162

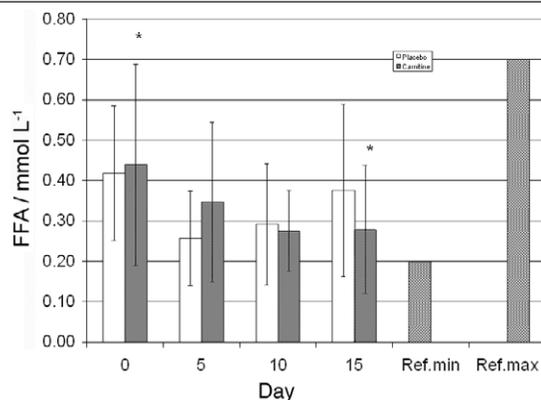


CCA-3226

### Effect of L-Carnitine Supplementation on Some Biochemical Parameters in Blood Serum of Sedentary Population

Ivančica Delaš, Tonko Dražić, Melita Čačić-Hribljan, and Krešimir Sanković

*Croat. Chem. Acta* **81** (2008) 163–168



CCA-3227

### Hydrolysis of Extracellular Adenine Nucleotides by Human Spermatozoa: Regulatory Role of Ectonucleotidases in Sperm Function

Pavle Romac, Tihana Žanić Grubišić, Davor Ježek, Marijana Vučić, and Ognjen Čulić

*Croat. Chem. Acta* **81** (2008) 169–176

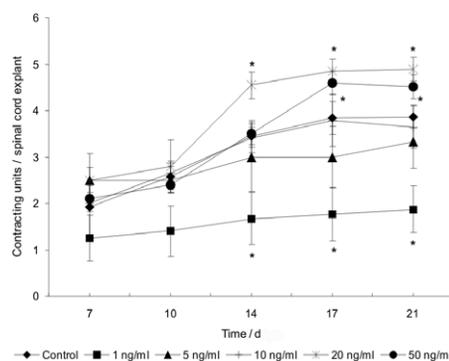


CCA-3228

### Effects of LIF on Neuromuscular Junction Formation in Co-cultures of Rat Spinal Cord Explant and Human Muscle

Tomaž Marš

*Croat. Chem. Acta* **81** (2008) 177–182

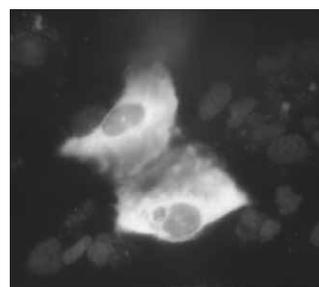


CCA-3229

### Head and Neck Tumor Cells Exhibit Altered Proliferation upon Overexpression of nm23 Genes

Maja Herak Bosnar, Klara Dubravčić, Ružica Bago, and Jasminka Pavelić

*Croat. Chem. Acta* **81** (2008) 183–189

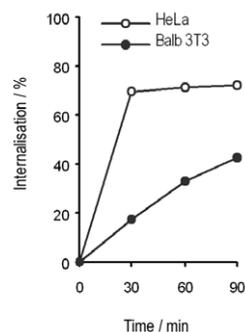


CCA-3230

### Endocytic Trafficking of Cholera Toxin in Balb 3T3 Cells

Gordana Blagojević, Hana Mahmutefendić, Natalia Kučić, Maja Ilić Tomaš, and Pero Lučin

*Croat. Chem. Acta* **81** (2008) 191–202

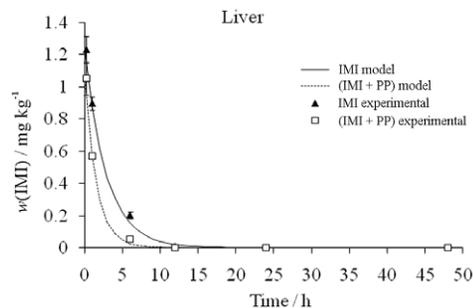


CCA-3231

### Kinetic Evaluation of Imidacloprid Degradation in Mice Organs Treated with Olive Oil Polyphenols Extract

Dalibor Broznić, Jelena Marinić, Marin Tota, Gordana Čanadi Jurešić, and Čedomila Milin

*Croat. Chem. Acta* **81** (2008) 203–209

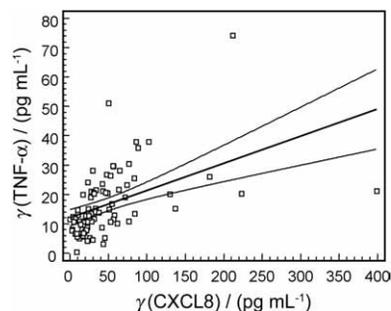


CCA-3232

### TNF- $\alpha$ , CXCL8, big ET-1 and hsCRP in Patients with Chronic Obstructive Pulmonary Disease

Sanja Marević, József Petrik, Nada Vrkić, Sanja Popović-Grle, Tihana Žanić-Grubišić, and Ivana Čepelak

*Croat. Chem. Acta* **81** (2008) 211–217



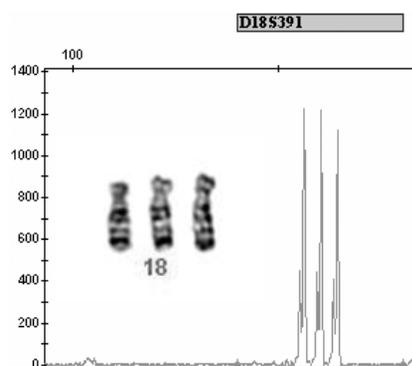
## NOTE

CCA-3233

### Quantitative Fluorescent PCR – A Rapid Approach to Prenatal Diagnostics of Common Autosomal Aneuploidies

Dinko Pavlinić, Snježana Džijan, Feodora Stipoljev, Jasenka Wagner, Goran Ćurić, and Gordan Lauc

*Croat. Chem. Acta* **81** (2008) 219–222



## APPENDIX

### OBITUARIES

|   |       |
|---|-------|
| <i>In memoriam</i> Vera Gamulin (1948–2006) | A1–A4 |
| Petar Strohal (1932–2008)                   | A5–A6 |

### ERRATUM

|            |    |
|------------|----|
| Igor Weber | A7 |
|------------|----|

### INSTRUCTIONS TO AUTHORS

A9–A12

### MINUTES OF THE ANNUAL ASSEMBLY OF THE CROATIAN CHEMICAL SOCIETY (in Croatian)

A13–A20

### ANNOUNCEMENTS AND ADVERTISEMENTS

A21–A24