Dr. Csaba Tömböly

Personal Data

Status/Function:	Senior researcher
Scientific focus:	Imaging probe development and cancer immunotherapy
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Education and qualifications

2002 – 2003 **Postdoctoral Researcher**
Vrije Universiteit Brussel, Belgium
- Synthesis and NMR structure of peptidomimetics, H-2 labelled amino acids

2001 **PhD in Medical Sciences**
HUN-REN Biological Research Centre and University of Szeged, Hungary
- Design, synthesis and radioactive labelling of opioid subtype-specific ligands (Summa cum laude)

1997 **MSc, Chemist**
University of Szeged, Hungary
- Investigating the oxidation of steroid olefins (Excellent diploma)

Work Experience

2023 – **Senior Researcher**
Werner Siemens Imaging Center and University Hospital, Eberhard Karls University, Tübingen, Germany
- Immuno PET probes

2008 – 2023 **Head of the Isotope Laboratory level B**
HUN-REN Biological Research Centre, Szeged, Hungary
- Accomplishing custom labelling projects for the industry and for the academy; especially H-3, C-14 or I-125 labelling of peptides and other bioactive compounds with diverse structure, tritium labeling technology

2008 – 2023 **Principal Investigator of the Laboratory of Chemical Biology**
HUN-REN Biological Research Centre, Szeged, Hungary
- Protein lipidation projects (preparative organic chemistry, recombinant proteins (prion protein, interleukin-15, enzymes), bioorthogonal conjugations, bioanalytical methods, Ga-68 labelling of exosomes for PET imaging)
- GPCR – ligand interactions (radioligands, radio-HPLC, LSC)

2008 – 2023 **Radiation Safety Officer**
HUN-REN Biological Research Centre, Szeged, Hungary
- Supervising the application of radioactive substances in the Biological Research Centre, responsible for the operation of one B level and eight C level isotope laboratories and for radiation safety training of employees and students

2004 – 2008 **Staff Scientist**
HUN-REN Biological Research Centre, Szeged, Hungary
- Peptide chemistry, tritium labelling of neuropeptides

Teaching Experience

2008 – 2023	Supervising BSc (5), MSc (5) and PhD (2) theses
2008 – 2023	Training employees and students for radiation safety

Additional Qualifications and Skills

Reviewer for various scientific journals and national / international grant proposals
Direct and synthon-based H-3, C-14 and I-125 labelling techniques
Liquid scintillation analysis
Peptide and protein chemistry
Mass Spectrometry and NMR spectroscopy

Research Grants and Fellowships

2017	National Research, Development and Innovation Office: "Preparation and cell membrane delivery of cholesteryl lipoproteins"; PI: Cs. Tömböly (130 000 EUR)
2016	Economic Development and Innovation Operative Programme GINOP-2.3.2-15: "Novel medical drug candidates and their delivery by innovative carrier systems"; consortial PI: Cs. Tömböly (130 000 EUR)
2009	Hungarian Scientific Research Fund: "Specific covalent modifications in proteins"; PI: Cs. Tömböly (53 000 EUR)
2005	Hungarian Scientific Research Fund: "Total synthesis of proteins for structural and functional studies"; PI: Cs. Tömböly (13 000 EUR)
2008 – 2023	Various third-party funding; PI: Cs. Tömböly (500 000 EUR)

Awards and Honours

2005, 2012	Bolyai Scholarship I and II (Hungarian Academy of Sciences)
2008	Kisfaludy publication award (Gedeon Richter Plc.)
2006	Participation award in the 18th Meeting of Nobel Prize Winners in Chemistry at Lindau
2000	György Hevesy award from the Radiochemical Section of the Hungarian Academy of Sciences

Professional Memberships

Chair of the Working Committee on Radiation Protection, Radiobiology and Radiochemistry (Szeged Division of the Hungarian Academy of Sciences)
Member of the Swiss Society of Radiopharmacy / Radiopharmaceutical Chemistry

Publications

1. Fülöp F, Palkó M, Zalán Z, Penke B, Fülöp L, **Tömböly Cs**, Bogár F "Novel high affinity sigma-1 receptor ligands from minimal ensemble docking-based virtual screening." *Int. J. Mol. Sci*. 22(15), 8112 (2021).
2. Bauder-Wüst U, Schäfer M, Winter R, Remde Y, Roscher M, Breyl H, Poethko T, **Tömböly Cs**, Benešová-Schäfer M "Synthesis of tritium-labeled Lu-PSMA-617: Alternative tool for biological evaluation of radiometal-based pharmaceuticals." *Appl. Rad. Isot*. 197, 110819 (2023).
3. Dvorácskó Sz, Dimmito M P, Sebastiani J, La Regina G, Silvestri R, Pieretti S, Stefanucci A, **Tömböly Cs**, Mollica A "Rimonabant-based compounds bearing hydrophobic amino acid derivatives as cannabinoid receptor subtype 1 ligands." *ACS Med. Chem. Lett*. 14, 479-486 (2023).
4. Dvorácskó Sz, Körmöczi T, Sija É, Bende B, Weiczner R, Varga T, Ilisz I, Institóris L, Kereszty É M, **Tömböly Cs**, Berkecz R "Focusing on the 5F-MDMB-PICA, 4F-MDMB-BICA synthetic cannabinoids and their primary metabolites in analytical and pharmacological aspects." *Toxicol. Appl. Pharmacol*. 470, 116548 (2023).
5. Dvorácskó Sz, Lázár L, Fülöp F, Palkó M, Zalán Z, Penke B, Fülöp L, **Tömböly Cs**, Bogár F "Novel high affinity sigma-1 receptor ligands from minimal ensemble docking-based virtual screening." *Int. J. Mol. Sci*. 22(15), 8112 (2021).
6. Szabó Í, Varga V É, Dvorácskó Sz, Farkas A E, Körmöczi T, Berkecz R, Kecskés Sz, Menyhárt Á, Frank R, Hantosi D, Cozzi N V, Frecska E, **Tömböly Cs**, Krizbai I A, Bari F, Farkas E "*N,N*-Dimethyltryptamine attenuates spreading depolarization and restrains neurodegeneration by sigma-1 receptor activation in the ischemic rat brain." *Neuropharmacol*. 192, 108612 (2021).
7. Almási N, Murlasits Z, Al-Awar A, Csonka Á, Dvorácskó Sz, **Tömböly Cs**, Török S, Bester D, Pósa A, Varga Cs, Kupai K „Effects of aging on proteasomal-ubiquitin system, oxidative stress balance and calcium homeostasis in middle-aged female rat colon" *Physiol. Int.* 108, 27-42 (2021).
8. Laczkó-Rigó R, Bakos É, Jójárt R, **Tömböly Cs**, Mernyák E, Özvegy-Laczka Cs "Selective antiproliferative effect of C-2 halogenated 13α-estrones on cells expressing Organic anion-transporting polypeptide 2B1 (OATP2B1)." *Toxicol. Appl. Pharmacol.* 115704 (2021).
9. Hus-Citharel H, Bouby N, Corbani M, Mion J, Mendre C, Darusi J, **Tömböly Cs**, Trueba M, Serradeil-Le Gal C, Llorens-Cortes C, Guillon G "Characterization of a functional V_{1B} vasopressin receptor in the male rat kidney: evidence for cross talk between V_{1B} and V_2 receptor signaling pathways." *Am. J. Physiol. Renal Physiol*. 321(3), F305-F321 (2021).
10. Zádor F, Joca S, Nagy-Grócz G, Dvorácskó Sz, Szűcs E, **Tömböly Cs**, Benyhe S, Vécsei L "Pro-inflammatory cytokines: Potential links between the endocannabinoid system and the kynurenine pathway in depression." *Int. J. Mol. Sci.* 22, 5903 (2021).
11. Zádor F, Nagy-Grócz G, Dvorácskó Sz, Bohár Zs, Cseh E K, Zádori D, Párdutz Á, Szűcs E, **Tömböly Cs**, Borsodi A, Benyhe S, Vécsei L "Long-term systemic administration of kynurenic acid brain region specifically elevates the abundance of functional CB1 receptors in rats." *Neurochem. Internat*. 138, Paper: 104752 (2020).
12. Szűcs E, Marton J, Szabó Z, Hosztafi S, Kékesi G, Tuboly G, Bánki L, Horváth Gy, Szabó P T, **Tömböly Cs**, Varga K Zs, Benyhe S, Ötvös F "Synthesis, biochemical, pharmacological characterization and in silico profile modelling of highly potent opioid orvinol and thevinol derivatives." *Eur. J. Med. Chem*. 191, Paper: 112145 (2020).
13. Almási N, Török Sz, Dvorácskó Sz, **Tömböly Cs**, Csonka Á, Baráth Z, Murlasits Zs, Valkusz Zs, Pósa A, Varga Cs, Kupai K "Lessons on the sigma-1 receptor in TNBS-induced rat colitis: modulation of the UCHL-1, IL-6 pathway." *Int. J. Mol. Sci.* 21(11), Paper: 4046 (2020).
14. Zádor F, Nagy-Grócz G, Kékesi G, Dvorácskó Sz, Szűcs E, **Tömböly Cs**, Horváth Gy, Benyhe S, Vécsei L "Kynurenines and the endocannabinoid system in schizophrenia: common points and potential interactions." *Molecules*, 24, 3709 (2019).
15. Dimmito MP, Stefanucci A, Pieretti S, Minosi P, Dvorácskó Sz, **Tömböly Cs**, Zengin G, Mollica A "Discovery of orexant and anorexant agents with indazole scaffold endowed with peripheral antiedema activity." *Biomolecules* 9(9), 492 (2019).
16. Dvorácskó Sz, Keresztes A, Mollica A, Stefanucci A, Macedonio G, Pieretti S, Zádor F, Walter F, Deli M, Kékesi G, Bánki L, Tuboly G, Horváth Gy, **Tömböly Cs** "Preparation of bivalent agonists for targeting the mu opioid and cannabinoid receptors." *Eur. J. Med. Chem*. 178, 571 (2019).
17. Leone S, Ferrante C, Recinella L, Chiavaroli A, Mollica A, **Tömböly Cs**, Stefanucci A, Dimmito MP, Dvorácskó Sz, Verratti V, De Petrocellis L, Orlando G, Brunetti L "Effects of RVD-hemopressin (α) on feeding and body weight after standard or cafeteria diet in rats." *Neuropeptides* 72, 38 (2018).
18. Stefanucci A, Macedonio G, Dvorácskó Sz, **Tömböly Cs**, Mollica A "Novel Fubinaca/Rimonabant hybrids as endocannabinoid system modulators." *Amino Acids* 51(11), 1595 (2018).

19. Bacsa I, Herman BE, Jójárt R, Herman KS, Wölfling J, Schneider Gy, Varga M, **Tömböly Cs**, Lanišnik RT, Szécsi M, Mernyák E "Synthesis and structure–activity relationships of 2- and/or 4-halogenated 13β- and 13α-estrone derivatives as enzyme inhibitors of estrogen biosynthesis." *J. Enzyme Inhib. Med. Chem.* 33(1), 1271 (2018).
20. Recinella L, Chiavaroli A, Ferrante C, Mollica A, Macedonio G, Stefanucci A, Dimmito MP, Dvorácskó Sz, **Tömböly Cs**, Brunetti L, Orlando G, Leone S "Effects of central RVD-hemopressin(a) administration on anxiety, feeding behavior and hypothalamic neuromodulators in the rat." *Pharm. Reports* 70, 650 (2018).
21. Stefanucci A, Novellino E, Macedonio G, Dimmito MP, Mirzaie S, Cardoso FC, Lewis R, Zádor F, Erdei AI, Dvorácskó S, **Tömböly Cs**, Benyhe S, Pieretti S, Minosi P, Mollica A "Design, synthesis and biological profile of mixed opioid agonist/N-VGCC blocker peptides." *New J. Chem.* 42, 5656 (2018).
22. Corbani M, Marir R, Trueba M, Chafai M, Vincent A, Borie AM, Desarménien MG, Ueta Y, **Tömböly Cs**, Olma A, Manning M, Guillon G "Neuroanatomical distribution and function of the vasopressin V1B receptor in the rat brain deciphered using specific fluorescent ligands." *Gen. Comp. Endocrinol*. 258, 15 (2018).
23. De Prins A, Martin C, Van Wanseele Y, **Tömböly Cs**, Tourwé D, Caveliers V, Holst B, Van Eeckhaut A, Rosenkilde M, Smolders I, Ballet S "Synthesis and in vitro evaluation of stabilized and selective Neuromedin U-1 receptor agonists." *ACS Med. Chem. Lett.* 9(5), 496 (2018).
24. De Prins A, Martin C, Van Wanseele Y, Skov LJ, **Tömböly Cs**, Tourwé D, Caveliers V, Van Eeckhaut A, Holst B, Rosenkilde MM, Smolders I, Ballet S "Development of potent and proteolytically stable human neuromedin U receptor agonists." *Eur. J. Med. Chem*. 144, 887 (2018).
25. Adamska A, Borics A, **Tömböly Cs**, Dvorácskó Sz, Lisowski M, Kluczyk A, Wolczanski G, Piekielna J, Janecka A „Synthesis, receptor binding studies, optical spectroscopic and in silico structural characterization of morphiceptin analogs with cis-4-amino-L-proline residues." *J. Pept. Sci.* 23, 864 (2017).
26. Ferrante C, Recinella L, Leone S, Chiavaroli A, Di Nisio C, Martinotti S, Mollica A, Macedonio G, Stefanucci A, Dvorácskó Sz, **Tömböly Cs**, De Petrocellis L, Vacca M, Brunetti L, Orlando G "Anorexigenic effects induced by RVD-hemopressin(α) administration." *Pharm. Reports* 69, 1402 (2017).
27. Leone S, Recinella L, Chiavaroli A, Martinotti S, Ferrante C, Mollica A, Macedonio G, Stefanucci A, Dvorácskó Sz, **Tömböly Cs**, De Petrocellis L, Vacca M, Brunetti L, Orlando G "Emotional disorders induced by hemopressin and RVD-hemopressin(α) administration in rats." *Pharm. Reports* 69, 1247 (2017).
28. Nagy-Grócz G, Zádor F, Dvorácskó Sz, Bohár Zs, Benyhe S, **Tömböly Cs**, Párdutz Á, Vécsei L "Interactions between kynurenines and endocannabinoids with special emphasis on migraine." *Int. J. Mol. Sci.* 18(8), 1617 (2017).
29. Adamska A, Janecka A, Szabó MR, Cerlesi MC, Calo G, Kluczyk A, **Tömböly Cs**, Borics A "Cyclic mu opioid receptor ligands containing multiple *N*-methylated amino acid residues." *Bioorg. Med. Chem. Lett.* 27(8) 1644 (2017).
30. Mollica A, Pelliccia S, Famiglini V, Stefanucci A, Macedonio G, Chiavaroli A, Orlando G, Brunetti L, Ferrante C, Pieretti S, Novellino E, Benyhe S, Zádor F, Erdei A, Szűcs E, Samavati R, Dvorácskó Sz, **Tömböly Cs**, Ragno R, Patsilinakos A, Silvestri R "Exploring the first Rimonabant analog-opioid peptide hybrid compound, as bivalent ligand for CB1 and opioid receptors." *J. Enzyme Inhib. Med. Chem.* 32(1), 444 (2017).
31. Schäfer B, Orbán E, Fiser G, Marton A, Vizler Cs, **Tömböly Cs** "Semisynthesis of membrane-anchored cholesteryl lipoproteins on live cell surface by azide-alkyne click reaction." *Tetrahedron Lett.* 57(8), 868 (2016).
32. Perlikowska R, Piekielna J, Gentilucci L, De Marco R, Cerlesi MC, Calo G, Artali R, **Tömböly Cs**, Kluczyk A, Janecka A "Synthesis of mixed MOR/KOR efficacy cyclic opioid peptide analogs with antinociceptive activity after systemic administration." *Eur. J. Med. Chem.* 109, 276 (2016).
33. Dvorácskó Sz, **Tömböly Cs**, Berkecz R, Keresztes A "Investigation of receptor binding and functional characteristics of hemopressin(1-7)." *Neuropeptides* 58, 15 (2016).
34. Monti L, Stefanucci A, Pieretti S, Marzoli F, Fidanza L, Mollica A, Mirzaie S, Carradori S, De Petrocellis L, Schiano Moriello A, Benyhe S, Zádor F, Szűcs E, Ötvös F, Erdei AI, Samavati R, Dvorácskó Sz, **Tömböly Cs**, Novellino E "Evaluation of the analgesic effect of 4-anilidopiperidine scaffold containing ureas and carbamates." *J. Enzyme Inhib. Med. Chem.* 11, 1 (2016).
35. Piekielna J, De Marco R, Gentilucci L, Cerlesi MC, Calo G, **Tömböly Cs**, Artali R, Janecka A "Redoubling the ring size of an endomorphin-2 analog transforms a centrally acting mu-opioid receptor agonist into a pure peripheral analgesic." *Biopolymers* 106, 309 (2016).
36. Lengyel I, Tóth F, Biyashev D, Szatmári I, Monory K, **Tömböly Cs**, Tóth G, Benyhe S, Borsodi A "A novel non-opioid binding site for endomorphin-1." *J. Physiol. Pharmacol*. 67, 605 (2016).
37. Szűcs E, Dvorácskó Sz, **Tömböly Cs**, Büki A, Kékesi G, Horváth Gy, Benyhe S "Decreased CB receptor binding and cannabinoid signaling in three brain regions of a rat model of schizophrenia." *Neurosci. Lett*. 633, 87 (2016).
38. Szlavicz E, Perera PS, **Tömböly Cs**, Helyes Zs, Zádor F, Benyhe S, Borsodi A, Bojnik E "Further characterization of hemopressin peptide fragments in the opioid and cannabinoid systems." *Anesth. Analg*. 121(6), 1488 (2015).

39. Piekielna J, Perlikowska R, do-Rego JC, do-Rego JL, Cerlesi MC, Calo G, Kluczyk A, Łapiński K, **Tömböly Cs**, Janecka A "Synthesis of mixed opioid affinity cyclic endomorphin-2 analogues with fluorinated phenylalanines." *ACS Med. Chem. Lett*. 6(5), 579 (2015).
40. Piekielna J, Kluczyk A, Gentilucci L, Cerlesi MC, Calo G, **Tömböly Cs**, Łapiński K, Janecki T, Janecka A "Ring size in cyclic endomorphin-2 analogs modulates receptor binding affinity and selectivity." *Org. Biomol. Chem.* 13(21), 6039 (2015).
41. Schäfer B, Orbán E, Kele Z, **Tömböly Cs** "Tritium labelling of a cholesterol amphiphile designed for cell membrane anchoring of proteins." *J. Label. Compd. Radiopharm.* 58(1), 7 (2015).
42. Piekielna J, Gentilucci L, De Marco R, Perlikowska R, Adamska A, Olczak J, Mazur M, Artali R, Modranka J, Janecki T, **Tömböly Cs**, Janecka A "Cyclic side-chain-linked opioid analogs utilizing cis- and trans-4-aminocyclohexyl-D-alanine." *Bioorg. Med. Chem.* 22(23), 6545 (2014).
43. Ballet S, Betti C, Novoa A, **Tömböly Cs**, Nielsen CU, Helms HC, Lesniak A, Kleczkowska P, Chung NN, Lipkowski AW, Brodin B, Tourwé D, Schiller PW "In vitro membrane permeation studies and in vivo antinociception of glycosylated Dmt^1-DALDA analogues." *ACS Med. Chem. Lett.* 5(4), 352 (2014).
44. Perlikowska R, Malfacini D, Cerlesi MC, Calo G, Piekielna J, Floriot L, Henry T, do-Rego JC, **Tömböly Cs**, Kluczyk A, Janecka A "Pharmacological characterization of endomorphin-2-based cyclic pentapeptides with methylated phenylalanine residues." *Peptides* 55, 145 (2014).
45. Schäfer B, Orbán E, Borics A, Huszár K, Nyeste A, Welker E, **Tömböly Cs** "Preparation of semisynthetic lipoproteins with fluorescent cholesterol anchor and their introduction to the cell membrane with minimal disruption of the membrane." *Bioconjugate Chem*. 24, 1684 (2013).
46. Petrovszki Z, Kovács Gy, Kékesi G, **Tömböly Cs**, Benedek Gy, Horváth Gy "Effects of peptide and lipid endocannabinoids on arthritic pain at spinal level. " *Anesth. Analg.* 114, 1346 (2012).
47. Bojnik E, Farkas J, Magyar A, **Tömböly Cs**, Güçlü Ü, Gündüz Ö, Borsodi A, Corbani M, Benyhe S "Selective and high affinity labelling of neuronal and recombinant nociceptin receptors with the hexapeptide radioprobe [^{3}H]Ac-RYYRIK-ol." *Neurochem. Int*. 55, 458 (2009).
48. **Tömböly Cs**, Ballet S, Feytens D, Kövér KE, Borics A, Lovas S, Al-Khrasani M, Fürst Zs, Tóth G, Benyhe S, Tourwé D "Endomorphin-2 with a β-turn backbone constraint retains the potent μ-opioid receptor agonist properties." *J. Med. Chem.* 51, 173 (2008).
49. Keresztes A, Szűcs M, Borics A, Kövér KE, Forró E, Fülöp F, **Tömböly Cs**, Péter A, Páhi A, Fábián G, Murányi M, Tóth G "New endomorphin analogues containing alicyclic beta-amino acids: influence on bioactive conformation and pharmacological profile." *J. Med. Chem*. 51, 4270 (2008).
50. Botros M, Johansson T, Zhou Q, Lindeberg G, **Tömböly Cs**, Tóth G, Le Grevès P, Nyberg F, Hallberg M "Endomorphins interact with the substance P (SP) aminoterminal SP(1-7) binding in the ventral tegmental area of the rat brain." *Peptides* 29, 1820 (2008).
51. Tóth G, Ioja E, **Tömböly Cs**, Ballet S, Tourwé D, Péter A, Martinek T, Chung NN, Schiller PW, Benyhe S, Borsodi A "β-Methyl substitution of cyclohexylalanine in Dmt-Tic-Cha-Phe peptides results in highly potent δ opioid antagonists." *J. Med. Chem.* 50, 328 (2007).
52. Ballet S, De Wachter R, Van Rompaey K, **Tömböly Cs**, Feytens D, Tóth G, Quartara L, Cucchi P, Meini S, Tourwé D "Bradykinin analogs containing the 4-amino-2-benzazepin-3-one scaffold at the C-terminus." *J. Pept. Sci.* 13, 164 (2007).
53. Botros M, Hallberg M, Johansson T, Zhou Q, Lindeberg G, Frändberg PA, **Tömböly Cs**, Tóth G, Le Grevès P, Nyberg F "Endomorphin-1 and endomorphin-2 differentially interact with specific binding sites for substance P (SP) aminoterminal SP1–7 in the rat spinal cord." *Peptides* 27, 753 (2006).
54. Van Rompaey K, Ballet S, **Tömböly Cs**, De Wachter R, Vanommeslaeghe K, Biesemans M, Willem R, Tourwé D "Synthesis and evaluation of the β-turn properties of 4-amino-1,2,4,5-tetrahydro-2-benzazepin-3-ones and of their spirocyclic derivative." *Eur. J. Org. Chem.* 13, 2899 (2006).
55. Cox V, Clarke S, Czyzyk T, Ansonoff M, Nitsche J, Hsu M-S, Borsodi A, **Tömböly Cs**, Tóth G, Hill R, Pintar J, Kitchen I "Autoradiography in opioid triple knock out mice reveals opioid receptor like binding of naloxone benzoylhydrazone." *Neuropharmacology* 48, 228 (2005).
56. Ioja E, Tóth G, Benyhe S, Tourwé D, Péter A, **Tömböly Cs**, Borsodi A "Opioid receptor binding characteristics and structure-activity studies of novel tetrapeptides in the TIPP (Tyr-Tic-Phe-Phe) series." *Neurosignals* 14, 317 (2005).
57. **Tömböly Cs**, Kövér KE, Péter A, Tourwé D, Biyashev D, Benyhe S, Borsodi A, Al-Khrasani M, Rónai AZ, Tóth G "Structure-activity study on the Phe side chain arrangement of endomorphins using conformationally constrained analogues." *J. Med. Chem*. 47, 735 (2004).
58. Tóth G, Keresztes A, **Tömböly Cs**, Péter A, Fülöp F, Tourwé D, Navratilova E, Varga É, Roeske WR, Yamamura HI, Szűcs M, Borsodi A "New endomorphin analogs with μ-agonist and δ-antagonist properties." *Pure Appl. Chem*. 76, 951 (2004).

59. Lengyel I, Orosz Gy, Biyashev D, Kocsis L, Al-Khrasani M, Rónai A, **Tömböly Cs**, Fürst Zs, Tóth G, Borsodi A "Side chain modifications change the binding and agonist properties of endomorphin-2." *Biochem. Biophys. Res. Commun*. 290, 153 (2002).
60. **Tömböly Cs**, Péter A, Tóth G "In vitro quantitative study of the degradation of endomorphins." *Peptides* 23, 1573 (2002).
61. Bujdosó E, Jászberényi M, **Tömböly Cs**, Tóth G, Telegdy Gy "Effects of endomorphin-1 on open-field behaviour and on the hypothalamo-pituitary-adrenal system." *Endocrine* 14, 221 (2001).
62. Bujdosó E, Jászberényi M, **Tömböly Cs**, Tóth G, Telegdy Gy "Behavioural and neuroendocrine actions of endomorphin-2." *Peptides* 22, 1459 (2001).
63. **Tömböly Cs**, Dixit R, Lengyel I, Borsodi A, Tóth G "Preparation of specifically tritiated endomorphins." *J. Label. Compd. Radiopharm*. 44, 355 (2001).
64. Martins JC, Van Rompaey K, Wittmann Gy, **Tömböly Cs**, Tóth G, De Kimpe N, Tourwé D "Unprecedented sigmatropic rearrangements leading to 2,3-dihydro-1*H*-2-benzazepine-3-carboxylic acid." *J. Org. Chem*. 66, 2884 (2001).
65. Szatmári I, Biyashev D, **Tömböly Cs**, Tóth G, Mácsai M, Szabó Gy, Borsodi A, Lengyel I "Influence of degradation on binding properties and biological activity of endomorphin 1." *Biochem. Biophys. Res. Commun*. 284, 771 (2001).
66. Monory K, Bourin MC, Spetea M, **Tömböly Cs**, Tóth G, Matthes HW, Kieffer BL, Hanoune J, Borsodi A "Specific activation of the m opioid receptor (MOR) by endomorphin 1 and endomorphin 2." *Eur. J. Neurosci*. 12, 577 (2000).
67. **Tömböly Cs**, Spetea M, Borsodi A, Tóth G "Synthesis of tritium labelled endomorphin-2 and its stability in the radioreceptor assay." *Czech. J. Phys.* 48/S1, 893 (1999).
68. Péter A, Tóth G, **Tömböly Cs**, Laus G, Tourwé D "Liquid chromatographic study of the enzymatic degradation of endomorphins, with identification by electrospray ionization mass spectrometry." *J. Chromatogr. A* 846, 39 (1999).
69. Horváth Gy, Szikszay M, **Tömböly Cs**, Benedek Gy "Antinociceptive effects of intrathecal endomorphin-1 and -2 in rats." *Life Sci*. 65, 2635 (1999).
70. Przewłocki R, Łabuz D, Mika J, Przewłocka B, **Tömböly Cs**, Tóth G "Pain inhibition by endomorphins." *Ann. N. Y. Acad. Sci*. 897, 154 (1999).
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