

Curriculum Vitae

Prof. Paola Dominici

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ACADEMIC POSITIONS

2024 – 2027: Member of Board of Governors, University of Verona

2021 - 2024: Member of Board of Governors, University of Verona

2015 – 2021: Head of Department of Biotechnology, University of Verona

2007 – present: Full professor of Biochemistry, University of Verona

2007 – 2009 Chairperson of Agroindustrial Biotechnologies Studies, (Presidente del Consiglio dei Corsi di Laurea in Biotecnologie Agroindustriali)

2010- 2015 (Sept.) Chairperson Collegio Didattico di Bioinformatica e Biotecnologie Mediche

2012 –2015 (Sept.) Coordinator of PhD Program in Applied Biotechnologies

1993-2006: Associate professor of Biochemistry, Department of Biotechnology, Facoltà di Scienze MM.FF.NN., University of Verona

1992-1993 Associate professor of Enzymology, Università Cattolica del Sacro Cuore, Policlinico Gemelli (Rome)

1983-1992 Research Assistant of Biochemistry, Faculty of Pharmacy, University of Perugia

EDUCATION and TRAINING

1982 Degree *summa cum laude* in Pharmaceutical Sciences (University of Perugia)

1986-1988 Postdoctoral fellowship at the University of Tennessee, Knoxville (USA) Department of Biochemistry, host Prof J.E. Churchich

TEACHINGS OVER THE PAST 10 YEARS

Bachelor's degree in Biotechnology - Bachelor's degree in Bioinformatics:

- General biochemistry and analytical biochemistry

Master's degree in Agri-Food Biotechnology:

- Applied enzymology

Master's degree in Bioinformatics and Medical Biotechnology:

- Protein engineering

Master's degree in Molecular and Medical Biotechnology:

- Protein misfolding and human diseases
- Research inspired laboratory

Supervisor of numerous degree and PhD theses.

SCIENTIFIC ACTIVITIES

The scientific interests are directed to the biochemistry and biophysics of proteins, with particular attention to the studies on the structure, function and evolution of pyridoxal 5'-phosphate (PLP) - dependent enzymes and metallo-proteins.

- Characterization of the stability, catalytic mechanism and specificity of pyridoxal phosphate-dependent enzymes, including DOPA decarboxylase, Glutamic acid decarboxylase, cystathionine beta synthase, ornithine aminotransferase and cystathionine gamma lyase.
- Elucidation of structure-dynamics-function relationships of non-symbiotic plant hemoglobins exploiting biochemical and biophysical methods.
- Calcium sensors (calmodulin and centrin) and the mechanisms by which these proteins regulate complex molecular calcium-dependent processes in different organisms.
- Characterization of enzymatic proteins of pathogens from both eukaryotic (*Toxoplasma gondii*) and prokaryotic organisms (*Pseudomonas aeruginosa*). This work primarily focuses on their interaction with pharmaceutical molecules from structural and functional perspectives, aiming to develop effective strategies for combating infections.
- Characterization of enzymes with peptidyl-prolyl isomerase (PPIase) activity. These enzymes belong to the cyclophilin family and play crucial roles in various biological processes (e.g. host invasion and pathogen survival). They are considered pivotal virulence factors, making them attractive drug candidates for the development of new antimicrobial molecules.

Invited speaker at various Research Centers / Universities and at national and international scientific meetings; referee of national funding agencies.

Ad-hoc referee for the following peer-reviewed journals:

FEBS Letters

Frontiers in Bioengineering and Biotechnology

PROTEINS: Structure, Function, and Bioinformatics

International Journal of Molecular Sciences

Frontiers in Molecular Biosciences

Oncotarget

Protein Science

RESEARCH SUPPORT (LAST 10 YEARS)

2022: PRIN Progetti di Ricerca di Rilevante Interesse Nazionale - Bando PNRR: Identification of Isoform-specific Cyclosporin based Inhibitors as Novel Therapeutic Molecules Against Toxoplasmosis; Role: Participant

2022: PRIN Progetti di Ricerca di Rilevante Interesse Nazionale : Hydrogen sulfide metabolism in *Pseudomonas aeruginosa* (patho)physiology; Role: Participant

2021: CIFRE program (Conventions Industrielles de Formation par la Recherche) for the funding of research doctorates for collaboration between universities and companies, ANRT (Ministère de l'Enseignement supérieur et de la Recherche), France. Partners: University of Montpellier, University of Verona, Oenobrand. Project: "Identification and characterization of C-S lyase enzymes for aroma release in beer and wine"

2019- Progetto MIUR-PRIN 2017 - Regulatory signals and redox systems in plant growth-defence trade off

Joint Projects 2019, Università di Verona - Exploring the natural biodiversity of C–S lyase enzymes in lactic acid bacteria for food and food-related Applications

Joint Projects 2018 Università di Verona - Green Fluorescent Protein-based Biosensor for Multiplexed Detection of Heavy Metals in Natural Waters

2017- Programma Operativo Regionale (POR), Fondo Europeo di Sviluppo Regionale (FESR), Regione del Veneto - Safe, Smart, Sustainable food for Health (3S-4H)

Joint Projects 2016 Università di Verona - Improving wine aroma complexity by directed evolution of non-Saccharomyces yeast enzymes

Joint Projects 2015 Università di Verona - Enzyme engineering for quality assessment of olive oil.

2013-2014 Regione Veneto - Molecular Wine: soluzioni di enologia tradizionale e molecolare al problema della *casse* proteica dei vini bianchi

PUBLICATIONS

SCOPUS (ID 7003580202), H-index 23; citations 1905

<https://www.scopus.com/authid/detail.uri?authorId=7003580202>

GOOGLE SCHOLAR, H index 28; i10-index 49, citations 2596

<https://scholar.google.it/citations?hl=it&pli=1&user=Lqh1iV4AAAAJ>

70. Catalytic specificity and crystal structure of cystathionine γ -lyase from *Pseudomonas aeruginosa*

Pedretti M, Fernández-Rodríguez C, Conter C, Oyenarte I, Favretto F, Di Matteo A, Dominici P, Petrosino M, Martinez-Chantar M L, Majtan T, Astegno, A

Scientific Reports (2024) 14(1), 9364

69. Evaluating the potential of non-immunosuppressive cyclosporin analogs for targeting *Toxoplasma gondii* cyclophilin: Insights from structural studies

Favretto F, Jiménez-Faraco E, Catucci G, Di Matteo A, Travaglini-Allocatelli C, Sadeghi S J, Dominici P, Hermoso J A, Astegno A.

Protein science (2024) 33(10) e5157

68. Role of myristoylation in modulating PCaP1 interaction with calmodulin

Pedretti M, Favretto F, Troilo F, Giovannoni M, Conter C, Mattei B, Dominici P, Travaglini-Allocatelli C, Di Matteo A, Astegno A.

Plant Physiol Biochem. (2023) Oct;203:108003. doi: 10.1016/j.plaphy.2023.108003. Epub 2023 Sep 9. PMID: 37717348.

67. Key substrate recognition residues in the active site of cystathionine beta-synthase from *Toxoplasma gondii*.

Conter C, Favretto F, Dominici P, Martinez-Cruz LA, Astegno A.

Proteins. (2023) Oct;91(10):1383-1393. doi: 10.1002/prot.26507. Epub 2023 May 10.

PMID: 37163386.

66. Structural Basis for Cyclosporin Isoform-Specific Inhibition of Cyclophilins from *Toxoplasma gondii*

F. Favretto, E. Jiménez-Faraco, C. Conter, P. Dominici, J. A. Hermoso, and A. Astegno

ACS Infect Dis, (2023) Jan 18, doi: 10.1021/acsinfecdis.2c00566.

65. Conformational Plasticity of Centrin 1 from *Toxoplasma gondii* in Binding to the Centrosomal Protein SFI1.

Bombardi, L.; Favretto, F.; Pedretti, M.; Conter, C.; Dominici, P.; Astegno, A. **Biomolecules** (2022) 12, Article number 1115.

64. Insights into Domain Organization and Regulatory Mechanism of Cystathionine Beta-Synthase from *Toxoplasma gondii*.

Conter, C. Fruncillo, S. Favretto, F. Fernández-Rodríguez, C. Dominici, P. Martínez-Cruz, L.A. Astegno, A. **International Journal of Molecular Sciences** (2022) 23, Article number 8169.

63. Structural basis for the functional diversity of centrin: A focus on calcium sensing properties and target recognition.

Pedretti, M. Bombardi, L. Conter, C. Favretto, F. Dominici, P. Astegno, A. **International Journal of Molecular Sciences**, (2021) Article number 12173.

62. The interplay of self-assembly and target binding in centrin 1 from *Toxoplasma gondii*.

Conter C, Bombardi L, Pedretti M, Favretto F, Di Matteo A, Dominici P, Astegno A. **Biochem J.** (2021) 478(13):2571-2587.

61. Structural insight into the unique conformation of cystathionine β -synthase from *Toxoplasma gondii*

Fernández-Rodríguez C, Oyenarte I, Conter C, González-Recio I, Núñez-Franco R, Gil-Pitarch C, Quintana I, Jiménez-Osés G, Dominici P, Martínez-Chantar ML, Astegno A, Martínez-Cruz LA. **Comput Struct Biotechnol J.** (2021) Jun 6;19:3542-3555.

60. Structural insights into the heme pocket and oligomeric state of non-symbiotic hemoglobins from *Arabidopsis thaliana*

A. Astegno, C. Conter, M. Bertoldi and P. Dominici **Biomolecules.** (2020) Nov 29;10(12):1615.

59. Cystathionine β -synthase is involved in cysteine biosynthesis and H₂S generation in *Toxoplasma gondii*

Conter C, Fruncillo S, Fernández-Rodríguez C, Martínez-Cruz LA, Dominici P, Astegno A.

Sci Rep. (2020) Sep 4;10(1):14657.

58. Distinct Calcium Binding and Structural Properties of Two Centrin Isoforms from *Toxoplasma gondii*

Bombardi L, Pedretti M, Conter C, Dominici P, Astegno A. **Biomolecules.** (2020) Aug 4;10(8):1142.

57. SAC3B is a target of CML19, the centrin 2 of *Arabidopsis thaliana*

M. Pedretti, C. Conter, P. Dominici, A. Astegno **Biochem J.** (2020) Jan 17; 477(1):173-189.

56. Cation and peptide binding properties of CML7, a calmodulin-like protein from *Arabidopsis thaliana*

Trande, M., Pedretti, M., Bonza, M.C., Di Matteo, A., D'Onofrio, M., Dominici, P., Astegno, A. **Journal of Inorganic Biochemistry**, (2019) 199, art. no. 110796

55. Functional characterization and structure-guided mutational analysis of the transsulfuration enzyme cystathionine γ -lyase from *Toxoplasma gondii*

Maresi, E., Janson, G., Fruncillo, S., Paiardini, A., Vallone, R., Dominici, P., Astegno, A. **International Journal of Molecular Sciences**, (2018) 19 (7), 2111

54. Towards understanding plant calcium signaling 2 through calmodulin-like proteins: a biochemical and structural perspective

La Verde V, Dominici P. and Astegno A. **Int J Mol Sci.** (2018) Apr 30;19(5).

53. Binding of calcium and target peptide to calmodulin-like protein CML19, the centrin 2 of *Arabidopsis thaliana*.

La Verde V, Trande M, D'Onofrio M, Dominici P, Astegno A. **Int J Biol Macromol.** (2018); 108:1289-1299

52. *Arabidopsis* calmodulin-like protein CML36 is a calcium (Ca²⁺) sensor that interacts with the plasma membrane Ca²⁺-ATPase Isoform ACA8 and stimulates its activity.

Astegno A, Bonza MC, Vallone R, La Verde V, D'Onofrio M, Luoni L, Molesini B, Dominici P. **J Biol Chem.** (2017) 292:15049-15061

51. Unique substrate specificity of ornithine aminotransferase from *Toxoplasma gondii*.

Astegno A, Maresi E, Bertoldi M, La Verde V, Paiardini A, Dominici P. **Biochem J.** (2017) 474(6):939-955.

50. Characterization of C-S lyase from *Lactobacillus delbrueckii* subsp. bulgaricus and its potential role in food flavors application

A. Allegrini, A. Astegno, V. La Verde, and P. Dominici; **J Biochem.** (2017);161(4):349-360

49. Metal binding affinity and structural properties of calmodulin-like protein14 from *Arabidopsis thaliana*

R. Vallone, V. La Verde, M. D'Onofrio, A. Giorgetti, P. Dominici and A. Astegno **Protein Science** (2016) 25(8):1461-71.

48. Residues in the Distal Heme Pocket of *Arabidopsis* Non-Symbiotic Hemoglobins: Implication for Nitrite Reductase Activity

N. Kumar, A. Astegno, Jian Chen, A. Giorgetti and P. Dominici **Int. J. Mol. Sci.** (2016) Apr 28; 17(5)

47. Biochemical and biophysical characterization of a plant calmodulin: Role of the N- and C-lobes in calcium binding, conformational change, and target interaction

Astegno A, La Verde V, Marino V, Dell'Orco D, and Dominici P **Biochim Biophys Acta.** (2016) 1864(3):297-307.

46. Functional roles of the hexamer organization of plant glutamate decarboxylase

A. Astegno, G. Capitani and P. Dominici **Biochim Biophys Acta** (2015) 1854(9):1229-37

45. Role of active-site residues Tyr55 and Tyr114 in catalysis and substrate specificity of *Corynebacterium diphtheriae* C-S lyase

Astegno, A. Allegrini, S. Piccoli, A. Giorgetti and P. Dominici **Proteins: Structure, Function, and Bioinformatics**, (2015) 83, 78–90

44. Structural plasticity of calmodulin on the surface of CaF₂ nanoparticles preserves its biological function

Astegno A, Maresi E, Marino V, Dominici P, Pedroni M, Piccinelli F, Dell'Orco D. **Nanoscale**, (2014) 6, 15037-15047

43. Characterization of C-S Lyase from *C. diphtheriae*: a possible target for new antimicrobial drugs

A. Astegno, A. Giorgetti, A. Allegrini and P. Dominici **BioMed Research International** (2013) 2013:701536

42. Oxygen and nitric oxide rebinding kinetics in non-symbiotic hemoglobin AHb1 from *Arabidopsis thaliana*

Abbruzzetti S., Faggiano S., Spyrakis F., Bruno S., Mozzarelli A., Astegno A., Dominici P., Viappiani C. **IUBMB Life** (2011), 63(12): 1094-100

41. Oxygen binding to *Arabidopsis thaliana* AHb2 nonsymbiotic hemoglobin: evidence for a role in oxygen transport

Spyrakis F, Bruno S, Bidon-Chanal A, Luque FJ, Abbruzzetti S, Viappiani C, Dominici P, Mozzarelli A. **IUBMB Life** (2011) 63(5):355-62

40. Histidine E7 Dynamics Modulates Ligand Exchange between Distal Pocket and Solvent in AHb1 from *Arabidopsis thaliana*.

Spyrakis F, Faggiano S, Abbruzzetti S, Dominici P, Cacciatori E, Astegno A, Droghetti E, Feis A, Smulevich G, Bruno S, Mozzarelli A, Cozzini P, Viappiani C, Bidon-Chanal A, Luque FJ. **J PHYS CHEM B**. (2011) 115(14):4138-46.

39. Ligand Migration and Binding in Non-Symbiotic Hemoglobins of *Arabidopsis thaliana*
K. Nienhaus, P. Dominici, A. Astegno, S. Abbruzzetti, C. Viappiani, G. U. Nienhaus **Biochemistry** (2010) 49(35):7448-58.

38. Recombinant human GAD65 accumulates to high levels in transgenic tobacco plants when expressed as an enzymatically inactive mutant
L. Avesani, A. Vitale, E. Pedrazzini, M. deVirgilio, A. Pompa, A. Barbante, E. Gecchele, P. Dominici, F. Morandini, A. Brozzetti, A. Falorni, M. Pezzotti **Plant Biotechnol J**, (2010) 8, 1-11

37. Structural plasticity and functional implications of internal cavities in distal mutants of type 1 non-symbiotic hemoglobin AHb1 from *Arabidopsis thaliana*

Faggiano S, Abbruzzetti S, Spyarakis F, Grandi E, Viappiani C, Bruno S, Mozzarelli A, Cozzini P, Astegno A, Dominici P, Brogioni S, Feis A, Smulevich G, Carrillo O, Schmidtke P, Bidon-Chanal A, Luque FJ **J PHYS CHEM B** (2009) 113, 16028-38.

36. A common structural basis for pH- and calmodulin-mediated regulation in plant glutamate decarboxylase
H. Gut, P. Dominici, S. Pilati, A. Astegno, M. V. Petoukhov, D. I. Svergun, M.G. Grutter and G. Capitani **J Mol Biol**, (2009) 392, 334-351

35. Different roles of protein dynamics and ligand migration in non-symbiotic hemoglobins AHb1 and AHb2 from *Arabidopsis thaliana*
S. Bruno, S. Faggiano, F. Spyarakis, A. Mozzarelli, E. Cacciatori, P. Dominici, E. Grandi, S. Abbruzzetti, C. Viappiani **GENE**, (2007) 398, 224- 233

34. Ligand Migration in Nonsymbiotic Hemoglobin AHb1 from *Arabidopsis thaliana*
S. Abbruzzetti, E. Grandi, S. Bruno, S. Faggiano, F. Spyarakis, A. Mozzarelli, E. Cacciatori, P. Dominici, C. Viappiani **J. PHYS. CHEM. B**, (2007) 111, 11901- 11910

33. The Reactivity with CO of AHb1 and AHb2 from *Arabidopsis thaliana* is Controlled by the Distal HisE7 and Internal Hydrophobic Cavities
S. Bruno, S. Faggiano, F. Spyarakis, A. Mozzarelli, S. Abbruzzetti, E. Grandi, C. Viappiani, A. Feis, S. Mackowiak, G. Smulevich, E. Cacciatori, P. Dominici **J AM CHEM SOC**, (2007) 129, 2880- 2889

32. The quantum mechanically mixed-spin state in a non-symbiotic plant hemoglobin: The effect of distal mutation on AHb1 from *Arabidopsis thaliana*
Droghetti E, Howes BD, Feis A, Dominici P, Fittipaldi M, Smulevich G **J INORG BIOCHEM** (2007) 101, 1812- 1819

30. *Arabidopsis* Nonsymbiotic Hemoglobin AHb1 Modulates Nitric Oxide Bioactivity
M Perazzolli, P Dominici, M C. Romero-Puertas, E Zago, J Zeier, M Sonoda, C Lamb, and M Delledonne **Plant Cell**, 2004; 16: 2785 - 2794.

29. Biochemical Properties of the PsbS Subunit of Photosystem II Either Purified from Chloroplast or Recombinant
P Dominici, S Caffarri, F Armenante, S Ceoldo, M Crimi, and R Bassi **J. BIOL. CHEM.**, 2002; 277: 22750 - 22758.
28. Structural insight into Parkinson's disease treatment from drug-inhibited DOPA decarboxylase.
P Burkhard, P Dominici, C Borri-Voltattorni, JN Jansonius, and VN Malashkevich **NATURE STRUCT BIOL**, 2001; 8(11): 963-7.
27. Preliminary X-ray analysis of a new crystal form of recombinant pig kidney DOPA decarboxylase.
VN Malashkevich, P Burkhard, P Dominici, PS Moore, C Borri Voltattorni, and JN Jansonius **Acta Crystallogr D Biol Crystallogr**, 1999; 55 (Pt 2): 568-70.
26. Reaction of dopa decarboxylase with alpha-methyldopa leads to an oxidative deamination producing 3,4-dihydroxyphenylacetone, an active site directed affinity label.
M Bertoldi, P Dominici, PS Moore, B Maras, and CB Voltattorni **BIOCHEMISTRY**, 1998; 37(18): 6552-61.
25. Mutation of cysteine 111 in Dopa decarboxylase leads to active site perturbation
P. DOMINICI, P. S. MOORE, S. CASTELLANI, M. BERTOLDI, and C. B. VOLTATTORNI **PROTEIN SCIENCE**, 1997; 6: 2007.
24. Aromatic amino acid methyl ester analogs form quinonoidal species with Dopa decarboxylase.
PS Moore, M Bertoldi, P Dominici, and C Borri Voltattorni **FEBS Lett**, 1997; 412(1): 245-8.
23. Mechanism-based Inactivation of Dopa Decarboxylase by Serotonin
M. Bertoldi, P. S. Moore, B. Maras, P. Dominici, and C. Borri Voltattorni **J. Biol. Chem.**, 1996; 271: 23954.
22. Cloning and expression of pig kidney dopa decarboxylase: comparison of the naturally occurring and recombinant enzymes.
PS Moore, P Dominici, and C Borri Voltattorni **Biochem J**, 1996; 315 (Pt 1): 249-56.
21. Transaldimination induces coenzyme reorientation in pig kidney dopa decarboxylase.
PS Moore, P Dominici, and CB Voltattorni **BIOCHIMIE**, Jan 1995; 77(9): 724-28.
20. Single crystal polarized absorption microspectrophotometry of aromatic L-amino acid decarboxylase.
Alessio Peracchi, Andrea Mozzarelli, Gian Luigi Rossi, Paola Dominici and Carla Borri Voltattorni **Protein Peptide Lett**, 1994 1(2): 98-105
19. Dissociation, unfolding and refolding trials of pig kidney 3,4-dihydroxyphenylalanine (dopa) decarboxylase.
P Dominici, PS Moore, and C Borri Voltattorni **Biochem J**, 1993; 295 (Pt 2): 493-500.
18. Modified purification of L-aromatic amino acid decarboxylase from pig kidney.
P Dominici, PS Moore, and CB Voltattorni **Protein Expr Purif**, 1993; 4(4): 345-7.
17. Crystallization and preliminary X-ray analysis of pig kidney DOPA decarboxylase.
VN Malashkevich, P Filipponi, U Sauder, P Dominici, JN Jansonius, and C Borri Voltattorni **J Mol Biol**, 1992; 224(4): 1167-70.

16. Pig kidney 3,4-dihydroxyphenylalanine (dopa) decarboxylase. Primary structure and relationships to other amino acid decarboxylases
B Maras, P Dominici, D Barra, F Bossa, and CB Voltattorni *Eur. J. Biochem.*, 1991; 201: 385.
15. Affinity labeling of pig kidney 3,4-dihydroxyphenylalanine (Dopa) decarboxylase with N-(bromoacetyl)pyridoxamine 5'-phosphate. Modification of an active-site cysteine
P Dominici, B Maras, G Mei, and C Borri Voltattorni *Eur. J. Biochem.*, 1991; 201: 393.
14. Pig kidney dopa decarboxylase. Structure and function
P. Dominici, P. Filippini, M. E. Schinina, D. Barra, and C. Borri Voltattorni *Ann. N.Y. Acad. Sci.*, 1990; 585: 162.
13. Proteolytic cleavage of pyridoxal kinase into two structural domains.
P Dominici, F Kwok, and JE Churchich *Biochimie*, (1989); 71(4): 585-90.
12. Pig kidney dopa decarboxylase: inactivation by iodoacetamide and sequence of the carboxyamidomethylcysteine-containing peptide.
P Dominici, M Simmaco, B Tancini, D Barra, and C Borri Voltattorni *J Enzyme Inhib*, 1989; 3(1): 67-76.
11. Affinity labeling of pyridoxal kinase with adenosine polyphosphopyridoxal
P Dominici, G Scholz, F Kwok, and JE Churchich *J. Biol. Chem.*, 1988; 263: 14712 - 14716.
10. Limited tryptic proteolysis of pig kidney 3,4-dihydroxyphenylalanine decarboxylase.
B Tancini, P Dominici, M Simmaco, ME Schinina, D Barra, and CB Voltattorni *Arch Biochem Biophys*, 1988; 260(2): 569-76.
9. Purification and characterization of rat-liver 3,4- dihydroxyphenylalanine decarboxylase
P Dominici, B Tancini, D Barra, and CB Voltattorni *Eur. J. Biochem.*, 1987; 169: 209.
8. DNA methylating activity in murine lymphoma cells xenogenized by triazene derivatives.
P Puccetti, P Fuschioti, P Dominici, C Borri-Voltattorni, L Romani, and MC Fioretti *Int J Cancer*, 1987; 39(6): 769-73.
7. DNA methylating activity in murine lymphoma cells treated with xenogenizing chemicals.
P Puccetti, M Allegrucci, C Borri Voltattorni, L Romani, P Dominici, and MC Fioretti *Cancer Detect Prev Suppl*, 1987; 1: 311-6.
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P Dominici, B Tancini, and CB Voltattorni *Arch Biochem Biophys*, 1986; 251(2): 762-6
5. Chemical modification of pig kidney 3,4-dihydroxyphenylalanine decarboxylase with diethyl pyrocarbonate. Evidence for an essential histidyl residue
P Dominici, B Tancini, and C Borri Voltattorni *J. Biol. Chem.*, 1985; 260: 10583 - 10589.
4. An essential arginine residue at the binding site of pig kidney 3,4-dihydroxyphenylalanine decarboxylase.
B Tancini, P Dominici, D Barra, and CB Voltattorni *Arch Biochem Biophys*, 1985; 238(2): 565-73.
3. Dye-sensitized photo-oxidation of pig kidney Dopa decarboxylase
A Pasqua, P Dominici, SM Murgia, A Poletti, and C Borri Voltattorni *Biochem Int*, 1984; 9(4): 437-46.

2. Inhibition of pig kidney dopa decarboxylase by coenzyme-5-hydroxytryptophan adducts.
P Dominici, M Curini, A Minelli, and C Borri Voltattorni *Experientia*, 1984; 40(8): 834-5.

1. Interaction of aromatic amino acids in D and L forms with 3,4-dihydroxyphenylalanine decarboxylase from pig kidney.

CB Voltattorni, A Minelli, and P Dominici *Biochemistry*, 1983; 22(9): 2249-54.