

Chymotrypsinogen

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Chymotrypsinogen is a precursor of the digestive enzyme chymotrypsin. This molecule is inactive and must be cleaved by trypsin, and then by other chymotrypsin molecules before it can reach its full activity. Its activity is the conversion of proteins to amino acids. The active site of the chymotrypsinogen is covered by a six amino acid long mask. It is only when this mask is removed - when it enters the lumen of the intestine and comes into contact with chymotrypsin molecules - that the enzyme becomes active. This is a very useful safety feature for a protein digesting enzyme. If it wasn't inactivated in this way it would digest the pancreas where it is produced. Category: Enzymes Cicatrix ([From the Wikipedia article Chymotrypsinogen.](#))



Recent Publications on Chymotrypsinogen:

- [\[Identification of HCV core protein binding proteins by yeast two-hybrid\]](#)
OBJECTIVE: To identify HCV core protein binding proteins. METHODS: The... 17th November, 2009
Institute of Infectious Diseases, Beijing Ditan Hospital, Beijing 100011,- *Zhonghua Gan Zang Bing Za Zhi.* 2009 Jul;17(7):501-4.
- [\[Capillary electrophoresis of intact basic proteins using noncovalently triple-layer coated capillaries.\]](#)
The usefulness of a noncovalent, positively charged capillary coating for... 17th November, 2009
Department of Biomedical Analysis, Utrecht University, Utrecht, The- *J Sep Sci.* 2009 Jul;32(14):2408-15. ([DOI Direct Link](#))
- [\[High binding capacity surface grafted monolithic columns for cation exchange chromatography of proteins and peptides.\]](#)
Poly(glycidyl methacrylate-co-ethylene methacrylate) monoliths have been... 10th November, 2009
The Molecular Foundry, E. O. Lawrence Berkeley National Laboratory,- *J Chromatogr A.* 2009 Oct 2;1216(40):6824-30. Epub 2009 Aug 18. ([DOI Direct Link](#))
- [\[Amount of adsorbed albumin loss by dialysis membranes with protein adsorption.\]](#)
Polymethylmethacrylate (PMMA) membrane is the first synthetic polymeric... 7th November, 2009
Department of Materials Science and Engineering, Shonan Institute of- *J Artif Organs.* 2009;12(3):194-9. Epub 2009 Sep 19. ([DOI Direct Link](#))
- [\[Noncovalent poly\(1-vinylpyrrolidone\)-based copolymer coating for the separation of basic proteins and lipoproteins by CE.\]](#)
A new simple and fast noncovalent coating method based on... 4th November, 2009
Laboratory of Analytical Chemistry, Department of Chemistry, University of- *Electrophoresis.* 2009 Nov 2;30(22):3939-3946. ([DOI Direct Link](#))
- [\[Proteomic analysis of porcine pancreas development.\]](#)
Porcine pancreas development is not well studied at the molecular level... 31st October, 2009
Aging Research Center, Korea Research Institute of Bioscience and- *BMB Rep.* 2009 Oct

31;42(10):661-6.

- [Effects of thermal heterogeneity in hydrophobic interaction chromatography.](#)
*Manipulating temperature and salt concentration can have a powerful effect...*27th October, 2009
Chemical and Process Engineering Department, Rzeszow University of- J Chromatogr A. 2009 Sep 25;1216(39):6716-27. Epub 2009 Aug 11. ([DOI Direct Link](#))
- [Chronic pancreatitis: genetics and pathogenesis.](#)
*Chronic pancreatitis (CP) is a persistent inflammation of the pancreas...*14th October, 2009
Institut National de la Sante et de la Recherche Medicale (INSERM), U613,- Annu Rev Genomics Hum Genet. 2009;10:63-87. ([DOI Direct Link](#))
- [Thermodynamic analysis of protein unfolding in aqueous solutions as a multisite reaction of protein with water and solute molecules.](#)
*Thermal unfolding of ribonuclease A, lysozyme, and chymotrypsinogen A was...*9th October, 2009
Department of Food Science, Ishikawa Prefectural University, Nonoichi,- Biophys Chem. 2009 Sep;144(1-2):46-52. Epub 2009 Jun 16. ([DOI Direct Link](#))
- [Molecular computations of preferential interaction coefficients of proteins.](#)
*Estimation of the thermodynamic properties of proteins in mixed solvents...*25th August, 2009
Department of Chemical Engineering, Massachusetts Institute of Technology,- J Phys Chem B. 2009 Sep 17;113(37):12546-54. ([DOI Direct Link](#))
- [Multi-variate approach to global protein aggregation behavior and kinetics: Effects of pH, NaCl, and temperature for alpha-chymotrypsinogen A.](#)
*A global characterization of nonnative aggregation is presented for...*5th August, 2009
Department of Chemical Engineering, University of Delaware, Newark,- J Pharm Sci. 2009 Aug 3. ([DOI Direct Link](#))
- [Polyanion hydrophobicity and protein basicity affect protein stability in protein-polyanion complexes.](#)
*Stability of four dissimilar basic proteins (chymotrypsinogen A,...*4th August, 2009
Department of Biochemistry, Faculty of Science, P J Safarik University,- Biomacromolecules. 2009 Sep 14;10(9):2533-8. ([DOI Direct Link](#))
- [Covalent binding of the organophosphorus agent FP-biotin to tyrosine in eight proteins that have no active site serine.](#)
*Organophosphorus (OP) esters are known to bind covalently to the active...*17th July, 2009
Eppley Institute, University of Nebraska Medical Center, 986805 Nebraska- Chem Biol Interact. 2009 Aug 14;180(3):492-8. Epub 2009 Apr 2. ([DOI Direct Link](#))
- [Enteropeptidase, a type II transmembrane serine protease.](#)
*Enteropeptidase, a type II transmembrane serine protease, is localized to...*2nd June, 2009
Department of Pathology and Laboratory Medicine, The Children's Hospital- Front Biosci (Elite Ed). 2009 Jun 1;1:242-9.
- [Altering efficiency of hydrophobic interaction chromatography by combined salt and temperature effects.](#)
*The coupled effect of salt concentration and temperature on the retention...*8th May, 2009
Chemical and Process Engineering Department, Rzeszow University of- J Chromatogr A. 2009 Apr 21. ([DOI Direct Link](#))

Chymotrypsinogen Patents:



- 7227009- [MT-SP1 polynucleotides and polypeptides](#)

- 7326326- [System and methods for electrophoretic separation of proteins on protein binding membranes](#)
- 7329506- [Apparatuses and methods for determining protease activity](#)
- 7329517- [Escapin protein, a broadly antimicrobial compound from ink of the sea hare *Aplysia californica*, and uses thereof](#)
- 7344881- [Methods of expanding stem and progenitor cells and expanded cell populations obtained thereby](#)
- 7361485- [Method for the detection of proteolytic enzymes](#)
- 7364892- [Microbial trypsin mutants having chymotrypsin activity and nucleic acids encoding same](#)
- 7368111- [Human antibodies specific for TGF.β.2](#)
- 7371727- [Methods and compositions for the treatment of gastrointestinal disorders](#)
- 7371821- [Cloning and expression of the full length 110 kDa antigen of *Orientia tsutsugamushi* to be used as a vaccine component against scrub typhus](#)
- 7385032- [Bimer or an oligomer of a dimer, trimer, quadromer or pentamer of recombinant fusion proteins](#)
- 7320799- [Coatings, coated articles and methods of manufacture thereof](#)
- 7320798- [Coatings, coated articles and methods of manufacture thereof](#)
- 7232559- [Diagnostic agents for pancreatic exocrine function](#)
- 7238426- [Column packing material](#)
- 7244396- [Method for preparation of microarrays for screening of crystal growth conditions](#)
- 7255835- [Single pass attenuated total reflection fourier transform infrared microscopy apparatus and method for identifying protein secondary structure, surface charge and binding affinity](#)
- 7259234- [Stable analogs of peptide and polypeptide therapeutics](#)
- 7285421- [Apparatus for capillary electrophoresis and associated method](#)
- 7297494- [Activatable probes and methods for in vivo gene detection](#)
- 7304036- [Methods and compositions for the treatment of gastrointestinal disorders](#)
- 7319091- [Human derived monocyte attracting purified protein product useful in a method of treating infection and neoplasms in a human body, and the cloning of full length cDNA thereof](#)
- 7320755- [Method of preparing ligands for hydrophobic interaction chromatography](#)
- 7390872- [NF-κ.B peptides designed to disrupt NEMO oligomerization](#)
- 7355015- [Matriptase, a serine protease and its applications](#)
- 7271249- [Biosensors, method for obtaining the same and uses thereof](#)
- 7396809- [Methods and reagents for treating glucose metabolic disorders](#)
- 7531627- [Protein ACA1 of *Antrodia camphorata*](#)
- 7537922- [Proteases and variants thereof](#)
- 7541172- [Transgenic amorpho-4, 11-diene synthesis](#)
- 7544773- [Antimicrobials against pathogenic bacteria and method for screening them](#)
- 7569375- [Alcohol dehydrogenases with increased solvent and temperature stability](#)
- 7569378- [Protein-deamidating enzyme, microorganism producing the same, gene encoding the same, production process therefor, and use thereof](#)
- 7585620- [Method for identifying and for extracting endotoxin](#)
- 7594986- [Apparatus for capillary electrophoresis comprising polyelectrolyte multilayers](#)
- 7608684- [Soluble CD14 antigen](#)
- 7524934- [Human brain carboxypeptidase B antibodies](#)
- 7514233- [Integrase cofactor](#)
- 7514215- [Sulfotransferase SULT2A1 sequence variants](#)
- 7399591- [Dual resonance energy transfer nucleic acid probes](#)
- 7407783- [Fructosylamine oxidase](#)
- 7408027- [Tools for the diagnosis and treatment of Alzheimer's disease](#)
- 7462477- [Protein-deamidating enzyme, microorganism producing the same, gene encoding the same, production process therefor, and use thereof](#)
- 7462695- [Insect chymotrypsin and inhibitors thereof](#)
- 7442779- [Isolation of proteins](#)
- 7465547- [Methods for detecting human low molecular weight CD14](#)

- 7468242- [Dermal micro organs, methods and apparatuses for producing and using the same](#)
- 7494979- [Method for treating congestive heart failure and other disorders](#)
- 7498410- [Bifunctional variants of recombinant tissue-type plasminogen activator with platelet aggregation inhibitory activity](#)
- 7608699- [Synthetic nuclear localization signal derived from lentiviral integrase and methods of use thereof](#)

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