

# Escherichia coli

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Escherichia coli, is a bacterium that is commonly found in the lower intestine of warm-blooded animals. Most E. coli strains are harmless, but some, such as serotype O157:H7, can cause serious food poisoning in humans, and are occasionally responsible for costly product recalls. The harmless strains are part of the normal flora of the gut, and can benefit their hosts by producing vitamin K<sub>2</sub>, or by preventing the establishment of pathogenic bacteria within the intestine. E. coli are not always confined to the intestine, and their ability to survive for brief periods outside the body makes them an ideal indicator organism to test environmental samples for fecal contamination. The bacteria can also be grown easily and its genetics are comparatively simple and easily-manipulated, making it one of the best-studied prokaryotic model organisms, and an important species in biotechnology. E. coli was discovered by German pediatrician and bacteriologist Theodor Escherich in 1885, and is now classified as part of the Enterobacteriaceae family of gamma-proteobacteria. ([From the Wikipedia article Escherichia coli](#).)

## Recent Publications on Escherichia coli:



- [Prevalence characterization of extended-spectrum beta-lactamases among Escherichia coli isolates collected in Zhengzhou.](#)  
*Objectives: To determine the prevalence and the diversity of...* 21st November, 2009  
The Third Affiliated Hospital, Zhengzhou University, Zhengzhou, China.- J Clin Lab Anal. 2009 Nov 19;23(6):404-407. ([DOI Direct Link](#))
- [IgM, IgG, and IgA anti-DNA topoisomerase I antibodies in systemic sclerosis.](#)  
*Background: Anti-DNA topoisomerase I (anti-topo I) antibodies have been...* 21st November, 2009  
Laboratory of Research in Autoimmunity, Mexico.- J Clin Lab Anal. 2009 Nov 19;23(6):408-416. ([DOI Direct Link](#))
- [The effect of calcium on the conformation of cobalamin transporter BtuB.](#)  
*BtuB is a beta-barrel membrane protein that facilitates transport of...* 21st November, 2009  
Department of Physics, University of Illinois, Urbana, Illinois.- Proteins. 2009 Oct 16. ([DOI Direct Link](#))
- [Different effects of transcriptional regulators marA, soxS, and rob on susceptibility of Escherichia coli to cationic antimicrobial peptides \(CAMPs\): Rob-dependent CAMP induction of the marRAB operon.](#)  
*Cationic antimicrobial peptides (CAMPs), a component of the mammalian...* 21st November, 2009  
Tufts University School of Medicine.- Microbiology. 2009 Nov 19. ([DOI Direct Link](#))
- [High prevalence and widespread distribution of multi-resistant Escherichia coli isolates in pigs and poultry in China.](#)  
*Escherichia coli play an important ecological role within resistant...* 21st November, 2009  
College of Veterinary Medicine, Guangdong Provincial Key Laboratory of- Vet J. 2009 Nov 17. ([DOI Direct Link](#))
- [Beverages obtained from soda fountain machines in the U.S. contain microorganisms, including](#)

## [coliform bacteria.](#)

*Ninety beverages of three types (sugar sodas, diet sodas and water) were...* 21st November, 2009  
Department of Biology, Virginia Western Community College, Roanoke, VA,- Int J Food Microbiol. 2009  
Nov 6. ([DOI Direct Link](#))

- [Synthesis and antibacterial activity of aminosugar-functionalized intercalating agents.](#)  
*A series of previously reported amino sugar-functionalized intercalating...* 21st November, 2009  
Alberta Ingenuity Centre for Carbohydrate Science and Department of- Carbohydr Res. 2009 Oct 20. ([DOI Direct Link](#))
- [IgA and IgG antibody responses following systemic immunization of cattle with native H7 flagellin differ in epitope recognition and capacity to neutralise TLR5 signalling.](#)  
*Systemic immunization of cattle with H7 flagellin results in induction of...* 21st November, 2009  
Moredun Research Institute, Pentlands Science Park, Bush Loan, Penicuik- Vaccine. 2009 Nov 16. ([DOI Direct Link](#))
- [Translation factor LepA contributes to tellurite resistance in Escherichia coli but plays no apparent role in the fidelity of protein synthesis.](#)  
*LepA is a translational GTPase highly conserved in bacterial lineages....* 21st November, 2009  
Department of Microbiology, The Ohio State University 484 W. 12th Ave,- Biochimie. 2009 Nov 16. ([DOI Direct Link](#))
- [Microbiologic Evaluation of Gallbladder Bile of Healthy Dogs and Dogs with Iatrogenic Hypercortisolism: A Pilot Study.](#)  
*Background: In people, hypercortisolism (HC) has been associated with...* 21st November, 2009  
Clinic for Small Animal Internal Medicine, University of Zurich, Zurich,- J Vet Intern Med. 2009 Nov 17. ([DOI Direct Link](#))
- [Prevalence of Diarrhea and Enteropathogens in Racing Sled Dogs.](#)  
*Background: Diarrhea is highly prevalent in racing sled dogs, although the...* 21st November, 2009  
Department of Clinical Sciences, College of Veterinary Medicine, Oregon- J Vet Intern Med. 2009 Nov 17. ([DOI Direct Link](#))
- [Effects of Escherichia coli lipopolysaccharide on the metformin pharmacokinetics in rats.](#)  
*The time-dependent (2-h, 24-h, and 96-h) effects of Escherichia coli...* 21st November, 2009  
College of Pharmacy and Research Institute of Pharmaceutical Sciences,- Xenobiotica. 2009  
Dec;39(12):946-954. ([DOI Direct Link](#))
- [Inhibition of the Class C beta-Lactamase from Acinetobacter spp.: Insights into Effective Inhibitor Design.](#)  
*The need to develop beta-lactamase inhibitors against class C...* 21st November, 2009  
- Biochemistry. 2009 Nov 19. ([DOI Direct Link](#))
- [Size-, Composition- and Shape-Dependent Toxicological Impact of Metal Oxide Nanoparticles and Carbon Nanotubes toward Bacteria.](#)  
*Ecotoxicological effects of nanoparticles (NP) are still poorly documented...* 21st November, 2009  
CEA, IRAMIS, Service interdisciplinaire des systemes moleculaires et- Environ Sci Technol. 2009 Nov 1;43(21):8423-8429. ([DOI Direct Link](#))
- [Covariation and Photoinactivation of Traditional and Novel Indicator Organisms and Human Viruses at a Sewage-Impacted Marine Beach.](#)  
*Sunlight modulates concentrations of Escherichia coli and enterococci in...* 21st November, 2009  
Environmental and Water Studies, Department of Civil and Environmental- Environ Sci Technol. 2009  
Nov 1;43(21):8046-8052. ([DOI Direct Link](#))

## **BioNews Results for Escherichia coli**

- [Saving the single cysteine: New antioxidant system found](#)

- Bioscience Technology Online: Nov 21 2009 8:13AM Matching: escherichia coli*
- [Protector of single cysteines discovered](#)  
*News-Medical.Net: Nov 21 2009 6:56AM Matching: escherichia coli*
  - [Saving the single cysteine: New antioxidant system found](#)  
*Research & Development: Nov 20 2009 11:55PM Matching: escherichia coli*
  - [Bioaccumulation of Arsenic in recombinant Escherichia coli expressing human metallothionein](#)  
*Bioscience Technology Online: Nov 20 2009 5:22PM Matching: escherichia coli*
  - [Expression of Bombyx mori 30Kc19 protein in Escherichia coli and its anti-apoptotic effect in Sf9 cell](#)  
*Bioscience Technology Online: Nov 20 2009 6:31PM Matching: escherichia coli*
  - [Campylobacter: Research from University of Leicester, Department of Genetics has provided new data on campylobacter](#)  
*NewsRX: Nov 20 2009 2:14PM Matching: escherichia coli*
  - [Fruits and vegetables consumption and the risk of histological subtypes of lung cancer in the European Prospec](#)  
*Bioscience Technology Online: Nov 20 2009 5:23PM Matching: escherichia coli*
  - [Pfizer's Geodon gets expanded FDA approval](#)  
*Bioscience Technology Online: Nov 20 2009 8:56PM Matching: escherichia coli*
  - [Ethnic difference in patients with type 2 diabetes mellitus in inter-East Asian populations: A systematic revi](#)  
*Bioscience Technology Online: Nov 20 2009 6:32PM Matching: escherichia coli*
  - [Does long-term farmyard manure fertilization affect short-term nitrogen mineralization from farmyard manure?](#)  
*Bioscience Technology Online: Nov 20 2009 6:31PM Matching: escherichia coli*
  - [Overexpression, purification, and functional characterization of the group II chaperonin from the hyperthermop](#)  
*Bioscience Technology Online: Nov 20 2009 5:23PM Matching: escherichia coli*
  - [Effects of oxygen volumetric mass transfer coefficient on transglutaminase production by Bacillus circulans BL](#)  
*Bioscience Technology Online: Nov 20 2009 5:22PM Matching: escherichia coli*
  - [Responses of GS-NS0 Myeloma cells to osmolality: Cell growth, intracellular mass metabolism, energy metabolism](#)  
*Bioscience Technology Online: Nov 20 2009 5:21PM Matching: escherichia coli*
  - [Bioethanol production from ammonia percolated wheat straw](#)  
*Bioscience Technology Online: Nov 20 2009 5:19PM Matching: escherichia coli*
  - [CDC surveillance data show risks of E. coli infections](#)  
*SmartBrief: Nov 20 2009 5:22PM Matching: escherichia coli*

## Escherichia coli Patents:



- 7618636- [Antigenic meningococcal peptides](#)
- 7618791- [Methods of detecting cancer with antibodies to cytokine receptor ZCYTOR19](#)
- 7618796- [Peptide-forming enzyme gene, peptide-forming enzyme, and peptide producing method](#)
- 7618797- [Infectious cDNA clone of North American porcine reproductive and respiratory syndrome \(PRRS\) virus and uses thereof](#)

- 7618798- [Alginate gel scaffold having a plurality of continuous parallel microtubular copper capillaries](#)
- 7618799- [Bacterial leader sequences for increased expression](#)
- 7618800- [Glycerol kinase, which has high resistance against preservative](#)
- 7618801- [Streptomyces protease](#)
- 7618803- [Method for producing L-amino acid using bacteria belonging to the genus Escherichia](#)
- 7618804- [Method for producing L-amino acid using bacteria belonging to the genus Escherichia](#)
- 7618814- [Microrna-related nucleic acids and uses thereof](#)
- 7618788- [Proteome epitope tags and methods of use thereof in protein modification analysis](#)
- 7618776- [Rolling circle replication reporter systems](#)
- 7618775- [Expanding the eukaryotic genetic code](#)
- 7618637- [Heat shock protein-based vaccines and immunotherapies](#)
- 7618639- [Synergistic phytoceutical compositions](#)
- 7618640- [Method and composition for reducing E. coli disease and enhancing performance](#)
- 7618641- [Functionally reconstituted viral membranes containing adjuvant](#)
- 7618651- [Pharmaceutical compositions for drug delivery and methods of treating or preventing conditions using same](#)
- 7618655- [Method for the preparation of aqueous solutions of reactive chlorine compounds](#)
- 7618658- [Anti-microbial agent and anti-microbial composition](#)
- 7618663- [Anti-arthritic herbal composition and method thereof](#)
- 7618770- [Methods and apparatus for reducing protein content in sperm cell extenders](#)
- 7618773- [Headloop DNA amplification](#)
- 7618817- [Genetically modified human natural killer cell lines](#)
- 7618819- [Use of pseudogene insertion sites to create novel traits in transgenic organisms](#)
- 7619070- [Humanized antibodies to interferon alpha receptor-1 \(IFNAR-1\)](#)
- 7619072- [Purification method for recombinant glucose binding protein](#)
- 7619076- [Synthetic compounds useful as nodulation agents of leguminous plants and preparation processes thereof](#)
- 7619077- [Nucleic acids encoding a galacturonosyl transferase enzyme \(GALAT1\) from arabidopsis](#)
- 7619079- [Db, the receptor for leptin, nucleic acids encoding the receptor, and uses thereof](#)
- 7619121- [Method for isolating a thiol](#)
- 7619136- [Technique for extending biological sugar chain via introduction of glycosyltransferase gene](#)
- 7619137- [Transcription factor stress-related proteins and methods of use in plants](#)
- 7619146- [Method for modifying plant morphology, biochemistry and physiology](#)
- 7620500- [Optimization of crossover points for directed evolution](#)
- 7619061- [Antigen constructs useful in the detection and differentiation of antibodies to HIV](#)
- 7619059- [Bimolecular optical probes](#)
- 7619058- [Epitope/peptide recognized by HLA-A2402-restricted Ep-CAM-specific CTL and use of the same](#)
- 7618829- [Method of detecting multiple analytes](#)
- 7618935- [Chaperonin 10 immunosuppression](#)
- 7618937- [Peptidomimetic polymers for antifouling surfaces](#)
- 7618942- [Method of using broad-spectrum delta-endotoxins](#)
- 7618947- [Modulation of HIF-1 beta expression](#)
- 7618949- [Drug-eluting stents coated with P2Y.sub.12 receptor antagonist compound](#)
- 7619000- [S-dimethylarsino-thiosuccinic acid S-dimethylarsino-2-thiobenzoic acid S-\(dimethylarsino\) glutathione as treatments for cancer](#)
- 7619008- [Xylitol for treatment of vaginal infections](#)
- 7619017- [Polymer emulsions resistant to biodeterioration](#)
- 7619057- [MHC class II restricted T cell epitopes from the cancer antigen, NY ESO-1](#)
- 7620502- [Methods for identifying sets of oligonucleotides for use in an in vitro recombination procedure](#)

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