

CITATION REPORT

List of articles citing

Review of human butyrylcholinesterase structure, function, genetic variants, history of use in the clinic, and potential therapeutic uses

DOI: 10.1016/j.pharmthera.2014.11.011

Pharmacology & Therapeutics, 2015, 148, 34-46.

Source: <https://exaly.com/paper-pdf/62874625/citation-report.pdf>

Version: 2024-04-23

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

#	Paper	IF	Citations
275	Assessing the therapeutic efficacy of oxime therapies against percutaneous organophosphorus pesticide and nerve agent challenges in the Hartley guinea pig. 2015 , 40, 759-75		6
274	Esterases involved in hydrolysis of prodrug and antedrug/soft drug. 2015 , 30, 422-432		
273	Human butyrylcholinesterase polymorphism: Molecular modeling. 2015 , 27 Suppl 1, S80-1		2
272	In vitro characterization of cationic copolymer-complexed recombinant human butyrylcholinesterase. 2015 , 98, 531-9		11
271	A novel expression cassette delivers efficient production of exclusively tetrameric human butyrylcholinesterase with improved pharmacokinetics for protection against organophosphate poisoning. 2015 , 118, 51-9		23
270	Chromosomal and Genetic Analysis of a Human Lung Adenocarcinoma Cell Line OM. 2016 , 129, 405-9		2
269	Butyrylcholinesterase deficiency. 2016 , 74, 279-85		5
268	Semicontinuous Bioreactor Production of Recombinant Butyrylcholinesterase in Transgenic Rice Cell Suspension Cultures. 2016 , 7, 412		30
267	Low Plasma Cholinesterase Activities are Associated with Deficits in Spatial Orientation, Reduced Ability to Perform Basic Activities of Daily Living, and Low Body Mass Index in Patients with Progressed Alzheimer's Disease. 2016 , 51, 801-13		11
266	Molecular polymorphism of human enzymes as the basis of individual sensitivity to drugs. Supercomputer-assisted modeling as a tool for analysis of structural changes and enzymatic activity of proteins. 2016 , 65, 1592-1607		6
265	Delayed recovery from paralysis associated with plasma cholinesterase deficiency. 2016 , 5, 1887		2
264	Reduced fibrillar β amyloid in subcortical structures in a butyrylcholinesterase-knockout Alzheimer disease mouse model. <i>Chemico-Biological Interactions</i> , 2016 , 259, 307-312	5	34
263	[Prolonged neuromuscular block in a patient with butyrylcholinesterase deficiency]. 2016 , 23, 497-500		1
262	Dynamics of human acetylcholinesterase bound to non-covalent and covalent inhibitors shedding light on changes to the water network structure. 2016 , 18, 12992-3001		25
261	Neuroinflammation: effect of surgical stress compared to anaesthesia and effect of physostigmine. 2016 , 38, 397-405		5
260	Activity and polymorphisms of butyrylcholinesterase in a Polish population. <i>Chemico-Biological Interactions</i> , 2016 , 259, 70-77	5	11
259	SAR study to find optimal cholinesterase reactivator against organophosphorous nerve agents and pesticides. 2016 , 90, 2831-2859		59

258	Development of immobilized-pepsin microreactors coupled to nano liquid chromatography and tandem mass spectrometry for the quantitative analysis of human butyrylcholinesterase. 2016 , 1461, 84-91		10
257	Novel approaches in prophylaxis/pretreatment and treatment of organophosphorus poisoning. 2016 , 191, 1433-1443		14
256	Naturally Occurring Genetic Variants of Human Acetylcholinesterase and Butyrylcholinesterase and Their Potential Impact on the Risk of Toxicity from Cholinesterase Inhibitors. 2016 , 29, 1381-92		49
255	Stability of suxamethonium in pharmaceutical solution for injection by validated stability-indicating chromatographic method. 2016 , 35, 551-559		2
254	Synthesis and study on activity in vitro of the high purity human butyrylcholinesterase conjugated with gold nanoparticles. 2016 , 468, 232-4		3
253	The Impact of Plasma Cholinergic Enzyme Activity and Other Risk Factors for the Development of Delirium in Patients Receiving Palliative Care. 2016 , 52, 525-532		12
252	A Novel Way To Radiolabel Human Butyrylcholinesterase for Positron Emission Tomography through Irreversible Transfer of the Radiolabeled Moiety. 2016 , 11, 1540-50		10
251	Exome screening to identify loss-of-function mutations in the rhesus macaque for development of preclinical models of human disease. 2016 , 17, 170		7
250	The potential role of bioscavenger in the medical management of nerve-agent poisoned casualties. <i>Chemico-Biological Interactions</i> , 2016 , 259, 175-181	5	21
249	Understanding the non-catalytic behavior of human butyrylcholinesterase silent variants: Comparison of wild-type enzyme, catalytically active Ala328Cys mutant, and silent Ala328Asp variant. <i>Chemico-Biological Interactions</i> , 2016 , 259, 223-232	5	7
248	Exploring Basic Tail Modifications of Coumarin-Based Dual Acetylcholinesterase-Monoamine Oxidase B Inhibitors: Identification of Water-Soluble, Brain-Permeant Neuroprotective Multitarget Agents. 2016 , 59, 6791-806		63
247	Biologics to Treat Substance Use Disorders. 2016 ,		3
246	Slow-binding inhibition of cholinesterases, pharmacological and toxicological relevance. 2016 , 593, 60-8		23
245	Emergence of catalytic bioscavengers against organophosphorus agents. <i>Chemico-Biological Interactions</i> , 2016 , 259, 319-326	5	30
244	Monoclonal antibodies to human butyrylcholinesterase reactive with butyrylcholinesterase in animal plasma. <i>Chemico-Biological Interactions</i> , 2016 , 243, 82-90	5	10
243	Learning performances and vulnerability to amyloid toxicity in the butyrylcholinesterase knockout mouse. 2016 , 296, 351-360		38
242	New insights on molecular interactions of organophosphorus pesticides with esterases. 2017 , 376, 30-43		40
241	An endophenotype approach to the genetics of alcohol dependence: a genome wide association study of fast beta EEG in families of African ancestry. 2017 , 22, 1767-1775		15

240	Engineering Therapeutic Enzymes. 2017 , 17-67		4
239	Pharmacogenomics of abused drugs. 2017 , 117-133		0
238	Plasma butyrylcholinesterase activity: a possible biomarker for differential diagnosis between Alzheimer's disease and dementia with Lewy bodies?. 2017 , 127, 1082-1086		8
237	Activity of cholinesterases in a young and healthy middle-European population: Relevance for toxicology, pharmacology and clinical praxis. 2017 , 277, 24-31		16
236	Generation of a monoclonal antibody that has reduced binding activity to VX-inactivated butyrylcholinesterase (BuChE) compared to BuChE by phage display. 2017 , 22, 114-119		5
235	Anti-acetylcholinesterase activity and antioxidant properties of extracts and fractions of <i>Carpolobia lutea</i> . 2017 , 55, 1875-1883		27
234	Resorcinol-, catechol- and saligenin-based bronchodilating β -agonists as inhibitors of human cholinesterase activity. 2017 , 32, 789-797		9
233	Binding Space Concept: A New Approach To Enhance the Reliability of Docking Scores and Its Application to Predicting Butyrylcholinesterase Hydrolytic Activity. 2017 , 57, 1691-1702		23
232	Butyrylcholinesterase regulates central ghrelin signaling and has an impact on food intake and glucose homeostasis. 2017 , 41, 1413-1419		25
231	Cholinesterase reactivators and bioscavengers for pre- and post-exposure treatments of organophosphorus poisoning. 2017 , 142 Suppl 2, 26-40		96
230	Progress in acetylcholinesterase reactivators and in the treatment of organophosphorus intoxication: a patent review (2006-2016). 2017 , 27, 971-985		24
229	Recent progress in the identification of selective butyrylcholinesterase inhibitors for Alzheimer's disease. <i>European Journal of Medicinal Chemistry</i> , 2017 , 132, 294-309	6.8	149
228	Discovery of a butyrylcholinesterase-specific probe via a structure-based design strategy. 2017 , 53, 3952-3955		25
227	Effects of freeze-drying on antioxidant and anticholinesterase activities in various cultivars of kiwifruit (spp.). 2017 , 26, 221-228		16
226	Protective propensity of bacoside A and bromelain on renal cholinesterases, β Aminobutyric acid and serotonin level of <i>Mus musculus</i> intoxicated with dichlorvos. <i>Chemico-Biological Interactions</i> , 2017 , 261, 139-144	5	5
225	Butyrylcholinesterase gene transfer in obese mice prevents postdieting body weight rebound by suppressing ghrelin signaling. 2017 , 114, 10960-10965		13
224	Development of immunosorbents coupled on-line to immobilized pepsin reactor and micro liquid chromatography-tandem mass spectrometry for analysis of butyrylcholinesterase in human plasma. 2017 , 1526, 70-81		4
223	Plant-expressed cocaine hydrolase variants of butyrylcholinesterase exhibit altered allosteric effects of cholinesterase activity and increased inhibitor sensitivity. 2017 , 7, 10419		16

222	Polyionic complexes of butyrylcholinesterase and poly-l-lysine-g-poly(ethylene glycol): Comparative kinetics of catalysis and inhibition and in vitro inactivation by proteases and heat. <i>Chemico-Biological Interactions</i> , 2017 , 275, 86-94	5	8
221	Quantification of Butyrylcholinesterase Activity as a Sensitive and Specific Biomarker of Alzheimer's Disease. 2017 , 58, 491-505		36
220	A high-throughput UHPLC-MS/MS method for the quantification of five aged butyrylcholinesterase biomarkers from human exposure to organophosphorus nerve agents. 2017 , 31, e3830		11
219	Brain region-specific effects of immobilization stress on cholinesterases in mice. 2017 , 20, 36-43		6
218	Farmacologí de los curares. 2017 , 43, 1-27		2
217	Therapeutic Delivery of Butyrylcholinesterase by Brain-Wide Viral Gene Transfer to Mice. 2017 , 22,		7
216	Evaluation of butyrylcholinesterase inhibitory activity by chlorogenic acids and coffee extracts assed in ITC and docking simulation models. 2018 , 109, 268-277		8
215	Development of Fc-Fused Cocaine Hydrolase for Cocaine Addiction Treatment: Catalytic and Pharmacokinetic Properties. 2018 , 20, 53		11
214	Molecular characterization and polymorphisms of butyrylcholinesterase in cynomolgus macaques. 2018 , 47, 185-191		
213	Design and synthesis of novel coumarin-pyridinium hybrids: In vitro cholinesterase inhibitory activity. <i>Bioorganic Chemistry</i> , 2018 , 77, 311-319	5.1	33
212	Purification, characterization, and N-glycosylation of recombinant butyrylcholinesterase from transgenic rice cell suspension cultures. 2018 , 115, 1301-1310		14
211	Cholinesterases and the fine line between poison and remedy. 2018 , 153, 205-216		58
210	Investigation of sarin(Se) reactivity against human plasma proteins using liquid chromatography-tandem mass spectrometry. 2018 , 53, 138-145		5
209	Analysis of Apparent Catalytic Parameters of Multiple Molecular Forms of Human Plasma Butyrylcholinesterase by Activity Gel-Scanning Following Non-denaturing Electrophoresis. 2018 , 8, 367-372		
208	Specific inhibition of acetylcholinesterase as an approach to decrease muscarinic side effects during myasthenia gravis treatment. 2018 , 8, 304		12
207	Redox-Controlled Fluorescent Nanoswitch Based on Reversible Disulfide and Its Application in Butyrylcholinesterase Activity Assay. 2018 , 90, 1643-1651		53
206	Comparative in vitro and in vivo effects of chlorpyrifos oxon in the outbred CD-1 mouse (<i>Mus musculus</i>) and great plains toad (<i>Anaxyrus cognatus</i>). 2018 , 37, 1898-1906		1
205	Proline-Rich Chaperones Are Compared Computationally and Experimentally for Their Abilities to Facilitate Recombinant Butyrylcholinesterase Tetramerization in CHO Cells. 2018 , 13, e1700479		6

204	The role of genetic background in susceptibility to chemical warfare nerve agents across rodent and non-human primate models. 2018 , 393, 51-61		3
203	A Rare Case of Drunk Driving in Japan: Alcohol-related Sleepwalking. 2018 , 08,		
202	Regulation of Xenobiotic Metabolism in the Liver. 2018 , 168-214		1
201	Role of Prenatal Hypoxia in Brain Development, Cognitive Functions, and Neurodegeneration. 2018 , 12, 825		60
200	Cryo-EM structure of the native butyrylcholinesterase tetramer reveals a dimer of dimers stabilized by a superhelical assembly. 2018 , 115, 13270-13275		13
199	Cholinesterases and Engineered Mutants for the Detection of Organophosphorus Pesticide Residues. 2018 , 18,		15
198	Donepezil-melatonin hybrids as butyrylcholinesterase inhibitors: Improving binding affinity through varying mode of linking fragments. 2018 , 351, e1800194		5
197	On-substrate Enzymatic Reaction to Determine Acetylcholinesterase Activity in Whole Blood by Paper Spray Mass Spectrometry. 2018 , 29, 2436-2442		9
196	Donepezil-based multi-functional cholinesterase inhibitors for treatment of Alzheimer's disease. <i>European Journal of Medicinal Chemistry</i> , 2018 , 158, 463-477	6.8	86
195	Association between early serum cholinesterase activity and 30-day mortality in sepsis-3 patients: A retrospective cohort study. <i>PLoS ONE</i> , 2018 , 13, e0203128	3.7	3
194	Changes in Cholinesterase Activity in Blood of Adolescent with Metabolic Syndrome after Supplementation with Extract from. 2018 , 2018, 5670145		12
193	Catalytic bioscavengers against organophosphorus agents: mechanistic issues of self-reactivating cholinesterases. 2018 , 409, 91-102		10
192	QM/MM Description of Newly Selected Catalytic Bioscavengers Against Organophosphorus Compounds Revealed Reactivation Stimulus Mediated by Histidine Residue in the Acyl-Binding Loop. 2018 , 9, 834		6
191	Optimization of Cholinesterase-Based Catalytic Bioscavengers Against Organophosphorus Agents. 2018 , 9, 211		52
190	The Proteomic Landscape in the Vitreous of Patients With Age-Related and Diabetic Retinal Disease. 2018 , 59, AMD31-AMD40		23
189	Catalytic bioscavengers as countermeasures against organophosphate nerve agents. <i>Chemico-Biological Interactions</i> , 2018 , 292, 50-64	5	33
188	A novel mutation in the BCHE gene and phenotype identified in a child with low butyrylcholinesterase activity: a case report. 2018 , 19, 58		4
187	Macrophage-targeted drugamers with enzyme-cleavable linkers deliver high intracellular drug dosing and sustained drug pharmacokinetics against alveolar pulmonary infections. 2018 , 287, 1-11		32

186	New insights into the interaction between mammalian butyrylcholinesterase and amitriptyline: a combined experimental and computational approach. 2019 , 44, 55-61		1
185	Manganese attenuates the effects of arsenic on neurobehavioral and biochemical changes in mice co-exposed to arsenic and manganese. 2019 , 26, 29257-29266		9
184	Clinical manifestations, laboratory findings, treatment and outcome of acute organophosphate or carbamate intoxication in 102 dogs: A retrospective study. 2019 , 251, 105349		5
183	Acetylcholinesterase is not a generic marker of extracellular vesicles. 2019 , 8, 1628592		21
182	Pharmacokinetics of K117 and K127, two novel antidote candidates to treat Tabun poisoning. <i>Chemico-Biological Interactions</i> , 2019 , 310, 108737	5	3
181	Dimerization of human butyrylcholinesterase expressed in bacterium for development of a thermally stable bioscavenger of organophosphorus compounds. <i>Chemico-Biological Interactions</i> , 2019 , 310, 108756	5	3
180	Differences in plasmatic butyrylcholinesterases (BChE) values between Pacific and Caribbean populations of terciopelo () in Costa Rica. 2019 , 5, e02620		0
179	Butyrylcholinesterase Protein Ends in the Pathogenesis of Alzheimer's Disease-Could Genotyping Be Helpful in Alzheimer's Therapy?. 2019 , 9,		17
178	Highly Selective Butyrylcholinesterase Inhibitors with Tunable Duration of Action by Chemical Modification of Transferable Carbamate Units Exhibit Pronounced Neuroprotective Effect in an Alzheimer's Disease Mouse Model. 2019 , 62, 9116-9140		31
177	Multi-charged bis(p-calixarene)/pillararene functionalized gold nanoparticles for ultra-sensitive sensing of butyrylcholinesterase. 2019 , 15, 8197-8200		7
176	A Simple 3D-Printed Enzyme Reactor Paper Spray Mass Spectrometry Platform for Detecting BuChE Activity in Human Serum. 2019 , 91, 12874-12881		28
175	Mass spectrometry based proteomic approach for the screening of butyrylcholinesterase adduct formation with organophosphates. 2019 , 197, 374-382		8
174	Biochemical Analysis and Association of Butyrylcholinesterase SNPs rs3495 and rs1803274 with Substance Abuse Disorder. 2019 , 67, 445-455		2
173	Thiol-ene click reaction-induced fluorescence enhancement by altering the radiative rate for assaying butyrylcholinesterase activity. 2019 , 144, 559-566		8
172	Haplotypes of butyrylcholinesterase K-variant and their influence on the enzyme activity. <i>Chemico-Biological Interactions</i> , 2019 , 307, 154-157	5	4
171	The four-helix bundle in cholinesterase dimers: Structural and energetic determinants of stability. <i>Chemico-Biological Interactions</i> , 2019 , 309, 108699	5	2
170	Carboxamides vs. methanimines: Crystal structures, binding interactions, photophysical studies, and biological evaluation of (indazole-5-yl)methanimines as monoamine oxidase B and acetylcholinesterase inhibitors. <i>European Journal of Medicinal Chemistry</i> , 2019 , 179, 404-422	6.8	5
169	Time-course of human cholinesterases-catalyzed competing substrate kinetics. <i>Chemico-Biological Interactions</i> , 2019 , 310, 108702	5	7

168	Susceptibility to adverse drug reactions. 2019 , 85, 2205-2212		14
167	Cholinesterase and carboxylesterase inhibitors as pharmacological agents. 2019 , 68, 967-984		23
166	Acetylcholinesterase, Butyrylcholinesterase and Glutathione S-Transferase Enzyme Activities and Their Correlation with Genotypic Variations Based on GST M1 and GST T1 Loci in Long Term-Pesticide-Exposed Tea Garden Workers of Sub-Himalayan West Bengal. 2019 , 11, 63-72		4
165	Comment on "A Sustained Reduction in Serum Cholinesterase Enzyme Activity Predicts Patient Outcome following Sepsis". 2019 , 2019, 5012874		1
164	First evidence of cholinesterase-like activity in Basidiomycota. <i>PLoS ONE</i> , 2019 , 14, e0216077	3.7	5
163	Computer-designed active human butyrylcholinesterase double mutant with a new catalytic triad. <i>Chemico-Biological Interactions</i> , 2019 , 306, 138-146	5	30
162	Enzymatic reaction modulated synthesis of quantum dots for visual detection of cholinesterase activity and inhibitor. <i>Sensors and Actuators B: Chemical</i> , 2019 , 292, 180-186	8.5	16
161	Highly selective carbamate-based butyrylcholinesterase inhibitors derived from a naturally occurring pyranoisoflavone. <i>Bioorganic Chemistry</i> , 2019 , 88, 102949	5.1	7
160	Development of a long-acting Fc-fused cocaine hydrolase with improved yield of protein expression. <i>Chemico-Biological Interactions</i> , 2019 , 306, 89-95	5	9
159	Human umbilical cord perivascular cells: A novel source of the organophosphate antidote butyrylcholinesterase. <i>Chemico-Biological Interactions</i> , 2019 , 305, 66-78	5	2
158	Synergy between the alteration in the N-terminal region of butyrylcholinesterase K variant and apolipoprotein E4 in late-onset Alzheimer's disease. 2019 , 9, 5223		6
157	Natural cholinesterase inhibitors from marine organisms. 2019 , 36, 1053-1092		34
156	Pharmacogenomics of Drugs of Abuse. 2019 , 103-120		
155	Gold Nanoclusters/Iron Oxyhydroxide Platform for Ultrasensitive Detection of Butyrylcholinesterase. 2019 , 91, 15866-15872		20
154	Novel cholinesterase paralogs of <i>Schistosoma mansoni</i> have perceived roles in cholinergic signalling and drug detoxification and are essential for parasite survival. 2019 , 15, e1008213		3
153	Genome-edited skin epidermal stem cells protect mice from cocaine-seeking behaviour and cocaine overdose. 2019 , 3, 105-113		12
152	In vitro and in vivo evaluation of enzymatic and antioxidant activity, cytotoxicity and genotoxicity of curcumin-loaded solid dispersions. 2019 , 125, 29-37		34
151	Structural stability of human butyrylcholinesterase under high hydrostatic pressure. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2019 , 1867, 107-113	4	2

150	Butyrylcholinesterase-a potential plasma biomarker in manganese-induced neurobehavioral changes. 2019 , 26, 6378-6387		8
149	3D structure of the natural tetrameric form of human butyrylcholinesterase as revealed by cryoEM, SAXS and MD. 2019 , 156, 196-205		15
148	A new sensitive spectrofluorimetric method for measurement of activity and kinetic study of cholinesterases. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2020 , 1868, 140270	4	5
147	Butyrylcholinesterase, a stereospecific in vivo bioscavenger against nerve agent intoxication. 2020 , 171, 113670		12
146	Search for new multi-target compounds against Alzheimer's disease among histamine H receptor ligands. <i>European Journal of Medicinal Chemistry</i> , 2020 , 185, 111785	6.8	16
145	Tuning Butyrylcholinesterase Inactivation and Reactivation by Polymer-Based Protein Engineering. 2020 , 7, 1901904		7
144	A Novel, Modified Human Butyrylcholinesterase Catalytically Degrades the Chemical Warfare Nerve Agent, Sarin. 2020 , 174, 133-146		3
143	Design and synthesis of benzodiazepine-1,2,3-triazole hybrid derivatives as selective butyrylcholinesterase inhibitors. 2020 , 24, 997-1013		4
142	In vivo evaluation of arsenic-associated behavioral and biochemical alterations in F and F mice. 2020 , 245, 125619		7
141	The structural diversity of ginsenosides affects their cholinesterase inhibitory potential. 2020 , 45,		
140	In Situ Generation of Prussian Blue by MIL-53 (Fe) for Point-of-Care Testing of Butyrylcholinesterase Activity Using a Portable High-Throughput Photothermal Device. 2020 , 92, 14806-14813 ¹¹		
139	Structure-activity relationship study of tryptophan-based butyrylcholinesterase inhibitors. <i>European Journal of Medicinal Chemistry</i> , 2020 , 208, 112766	6.8	5
138	Genetic Testing for Variants Identifies Patients at Risk of Prolonged Neuromuscular Blockade in Response to Succinylcholine. 2020 , 13, 405-414		1
137	Slow-binding reversible inhibitor of acetylcholinesterase with long-lasting action for prophylaxis of organophosphate poisoning. 2020 , 10, 16611		6
136	Multi-organ characterisation of B-esterases in the European sea bass (<i>Dicentrarchus labrax</i>): Effects of the insecticide fipronil at two temperatures. 2020 , 228, 105617		3
135	Potential Nutraceutical Properties of Leaves from Several Commonly Cultivated Plants. 2020 , 10,		12
134	The multiple biological roles of the cholinesterases. 2021 , 162, 41-56		8
133	Phosphoramidate Compounds for Butyrylcholinesterase Selective Inhibitors. 2020 , 41, 1153-1160		1

132	Catalytic Detoxification of Organophosphorus Nerve Agents by Butyrylcholinesterase-Polymer-Oxime Bioscavengers. 2020 , 21, 3867-3877		5
131	Butyrylcholinesterase in Substance Abuse: An Overview. 2020 , 52, 145-158		1
130	Monoclonal antibodies to fetal bovine serum acetylcholinesterase distinguish between acetylcholinesterases from ruminant and non-ruminant species. <i>Chemico-Biological Interactions</i> , 2020 , 330, 109225	5	0
129	Quetiapine and novel PDE10A inhibitors potentiate the anti-BuChE activity of donepezil. 2020 , 35, 1743-1750		1
128	A method to simplify bioreactor processing for recombinant protein production in rice cell suspension cultures. 2020 , 7, 101139		2
127	A Bioorthogonally Synthesized and Disulfide-Containing Fluorescence Turn-On Chemical Probe for Measurements of Butyrylcholinesterase Activity and Inhibition in the Presence of Physiological Glutathione. 2020 , 10, 1169		1
126	Effects of Kifunensine on Production and -Glycosylation Modification of Butyrylcholinesterase in a Transgenic Rice Cell Culture Bioreactor. <i>International Journal of Molecular Sciences</i> , 2020 , 21,	6.3	5
125	Decreased Activity of Circulating Butyrylcholinesterase in Blood Is an Independent Prognostic Marker in Pancreatic Cancer Patients. 2020 , 12,		6
124	Monitoring of blood cholinesterase activity in workers exposed to nerve agents. 2020 , 1035-1045		
123	Rational design of a near-infrared fluorescence probe for highly selective sensing butyrylcholinesterase (BChE) and its bioimaging applications in living cell. 2020 , 219, 121278		5
122	Pharmacogenetic considerations when prescribing cholinesterase inhibitors for the treatment of Alzheimer's disease. 2020 , 16, 673-701		14
121	Ultrasensitive detection of butyrylcholinesterase activity based on the inner filter effect of MnO nanosheets on sulfur nanodots. 2020 , 145, 5206-5212		11
120	Design, synthesis and biological evaluation of acridone glycosides as selective BChE inhibitors. 2020 , 491, 107977		6
119	Enhanced pulmonary systemic delivery of protein drugs via zwitterionic polymer conjugation. 2020 , 322, 170-176		12
118	Diagnostics and treatment of nerve agent poisoning-current status and future developments. 2020 , 1479, 13-28		9
117	Acetylcholinesterase: The "Hub" for Neurodegenerative Diseases and Chemical Weapons Convention. 2020 , 10,		8
116	Relationship between butyrylcholinesterase activity and lipid parameters in workers occupationally exposed to pesticides. 2020 , 27, 39365-39374		1
115	Biotransformation of warfare nerve agents. 2020 , 953-966		

114	Behavioral toxicity of nerve agents. 2020 , 499-513		2
113	Expression of cholinesterases and their anchoring proteins in rat heart. 2020 , 98, 473-476		3
112	Reinterpretation of common pathogenic variants in ClinVar revealed a high proportion of downgrades. 2020 , 10, 331		13
111	Characterization of four BCHE mutations associated with prolonged effect of suxamethonium. 2021 , 21, 165-173		1
110	Production of recombinant butyrylcholinesterase from transgenic rice cell suspension cultures in a pilot-scale bioreactor. 2021 , 118, 1431-1443		5
109	A microfluidic paper-based analytical device (PAD) with smartphone readout for chlorpyrifos-oxon screening in human serum. 2021 , 222, 121535		12
108	A highly butyrylcholinesterase selective red-emissive mitochondria-targeted fluorescent indicator imaging in liver tissue of mice. <i>Sensors and Actuators B: Chemical</i> , 2021 , 330, 129348	8.5	3
107	Structure and therapeutic uses of butyrylcholinesterase: Application in detoxification, Alzheimer's disease, and fat metabolism. 2021 , 41, 858-901		10
106	SERS for Bacteria, Viruses, and Protein Biosensing. 2021 , 75-94		1
105	Acetylcholinesterase and human cancers. 2021 , 152, 1-66		3
104	Development of versatile and potent monoquaternary reactivators of acetylcholinesterase. 2021 , 95, 985-1001		1
103	Reducing alcohol and/or cocaine-induced reward and toxicity via an epidermal stem cell-based gene delivery platform. 2021 , 26, 5266-5276		1
102	Pyrazole Scaffold Synthesis, Functionalization, and Applications in Alzheimer's Disease and Parkinson's Disease Treatment (2011-2020). 2021 , 26,		13
101	The Role of Butyrylcholinesterase and Iron in the Regulation of Cholinergic Network and Cognitive Dysfunction in Alzheimer's Disease Pathogenesis. <i>International Journal of Molecular Sciences</i> , 2021 , 22,	6.3	5
100	Determination of butyrylcholinesterase activity based on thiamine luminescence modulated by MnO nanosheets. 2021 , 224, 121831		3
99	Reactivation of organophosphate-inhibited serum butyrylcholinesterase by novel substituted phenoxyalkyl pyridinium oximes and traditional oximes. 2021 , 452, 152719		
98	Synthesis and Initial Characterization of a Selective, Pseudo-irreversible Inhibitor of Human Butyrylcholinesterase as PET Tracer. 2021 , 16, 1427-1437		1
97	Acetylcholine production by group 2 innate lymphoid cells promotes mucosal immunity to helminths. 2021 , 6,		19

96	Phenotype and genotype characteristics of 58 patients showing a prolonged effect of succinylcholine: A four-year experience. 2021 , 40, 100847		
95	Analysis of variability of functionals of recombinant protein production trajectories based on limited data.		
94	Phenothiazine-Tacrine Heterodimers: Pursuing Multitarget Directed Approach in Alzheimer's Disease. 2021 , 12, 1698-1715		1
93	Organophosphate detoxification by membrane-engineered red blood cells. 2021 , 124, 270-281		4
92	Parental Lead Exposure Promotes Neurobehavioral Disorders and Hepatic Dysfunction in Mouse Offspring. 2021 , 1		1
91	Enhancement of Fear Extinction Memory and Resistance to Age-Related Cognitive Decline in Butyrylcholinesterase Knockout Mice and ()-Bambuterol Treated Mice. 2021 , 10,		1
90	Exploring the effectiveness of the TSR-based protein 3-D structural comparison method for protein clustering, and structural motif identification and discovery of protein kinases, hydrolases, and SARS-CoV-2's protein via the application of amino acid grouping. 2021 , 92, 107479		0
89	High performance liquid chromatographic assays with UV-detection for evaluation of inhibitors of acetylcholinesterase and butyrylcholinesterase. 1-11		1
88	Design, synthesis and evaluation of cholinesterase hybrid inhibitors using a natural steroidal alkaloid as precursor. <i>Bioorganic Chemistry</i> , 2021 , 111, 104893	5.1	4
87	A Genetically Modified Skin Graft for Treating Alcohol Use Disorder and/or Polysubstance Abuse With Cocaine. 11,		
86	-Guided Rational Drug Design and Semi-synthesis of C(2)-Functionalized Huperzine A Derivatives as Acetylcholinesterase Inhibitors. 2021 , 6, 19924-19939		2
85	Structure-activity relationships of dually-acting acetylcholinesterase inhibitors derived from tacrine on N-methyl-d-Aspartate receptors. <i>European Journal of Medicinal Chemistry</i> , 2021 , 219, 113434	6.8	4
84	"Clicking" fragment leads to novel dual-binding cholinesterase inhibitors. 2021 , 42, 116269		1
83	Sensitive detection of butyrylcholinesterase activity based on a separation-free photothermal assay. 2021 , 166, 106220		3
82	Molecular docking and dynamics studies of cigarette smoke carcinogens interacting with acetylcholinesterase and butyrylcholinesterase enzymes of the central nervous system. 2021 , 1		2
81	Interaction of Exogenous Butyrylcholinesterase with β Amyloid Plaques in 5XFAD/Butyrylcholinesterase-Knockout Mouse Brain. 2021 , 18, 470-481		
80	Genetic Association of Butyrylcholinesterase with Major Depressive Disorder. 2021 , 1		0
79	Molecular cloning and characterization of an atypical butyrylcholinesterase-like protein in zebrafish. 2021 , 255, 110590		3

78	Therapeutic nanoreactors for detoxification of xenobiotics: Concepts, challenges and biotechnological trends with special emphasis to organophosphate bioscavenging. <i>Chemico-Biological Interactions</i> , 2021 , 346, 109577	5	5
77	Study of the potential association of the BCHE rs1803274 genetic polymorphism and serum level of its protein with breast cancer. 2021 , 29, 100913		1
76	Butyrylcholinesterase-Protein Interactions in Human Serum. <i>International Journal of Molecular Sciences</i> , 2021 , 22,	6.3	0
75	The toxicological impact of some agents on glutathione S-transferase and cholinesterase enzymes. 2021 , 281-290		1
74	Fluorescent Determination of Butyrylcholinesterase Activity and Its Application in Biological Imaging and Pesticide Residue Detection. <i>ACS Sensors</i> , 2021 , 6, 1138-1146	9.2	19
73	Cocaine Hydrolases Designed from Butyrylcholinesterase. 2016 , 187-225		2
72	Le déficit en butyrylcholinestérase plasmatique: Valuation des connaissances et de l'expérience des praticiens en anesthésie-réanimation. <i>Anesthésie & Réanimation</i> , 2020 , 6, 207-218	0.1	1
71	Quantitative butyrylcholinesterase activity detection by surface-enhanced Raman spectroscopy. <i>Sensors and Actuators B: Chemical</i> , 2018 , 259, 75-82	8.5	46
70	Huprines: An insight into the synthesis and biological properties. <i>Russian Chemical Reviews</i> , 2020 , 89, 999-1039	6.8	4
69	New Insights into Butyrylcholinesterase Activity Assay: Serum Dilution Factor as a Crucial Parameter. <i>PLoS ONE</i> , 2015 , 10, e0139480	3.7	23
68	Structural analysis of human glycoprotein butyrylcholinesterase using atomistic molecular dynamics: The importance of glycosylation site ASN241. <i>PLoS ONE</i> , 2017 , 12, e0187994	3.7	10
67	Multifunctional Ligands Targeting Phosphodiesterase as the Future Strategy for the Symptomatic and Disease-Modifying Treatment of Alzheimer's Disease. <i>Current Medicinal Chemistry</i> , 2020 , 27, 5351-5373	4.3	8
66	Nerve Agents Surrogates: Invaluable Tools for Development of Acetylcholinesterase Reactivators. <i>Current Organic Chemistry</i> , 2019 , 23, 1539-1559	1.7	8
65	Therapeutic Potential of Multifunctional Tacrine Analogues. <i>Current Neuropharmacology</i> , 2019 , 17, 472-490	4.7	22
64	Dose-Dependent Tissue Distribution of K117, a Bis-pyridinium Aldoxime, in Rats. <i>Open Medicinal Chemistry Journal</i> , 2019 , 13, 1-6	1.2	3
63	Counteracting poisoning with chemical warfare nerve agents. <i>Arhiv Za Higijenu Rada I Toksikologiju</i> , 2020 , 71, 266-284	1.7	5
62	Point-of-care testing of butyrylcholinesterase activity through modulating the photothermal effect of cuprous oxide nanoparticles. <i>Mikrochimica Acta</i> , 2021 , 188, 392	5.8	0
61	Developments of spectroscopic biosensors for cholinesterase and its inhibitors in the last decade: an overview. <i>Applied Spectroscopy Reviews</i> , 1-25	4.5	0

60	N-Phenacylthiazolium Salts as Inhibitors of Cholinesterases. <i>French-Ukrainian Journal of Chemistry</i> , 2017 , 5, 1-14	0.3	1
59	The physiological butyrylcholinesterase tetramer is a dimer of dimers stabilized by a superhelical assembly.		
58	Novel cholinesterase paralogs of <i>Schistosoma mansoni</i> have perceived roles in cholinergic signaling, glucose scavenging and drug detoxification and are essential for parasite survival.		
57	Therapeutic potential of quinazoline derivatives for Alzheimer's disease: A comprehensive review. <i>European Journal of Medicinal Chemistry</i> , 2022 , 227, 113949	6.8	5
56	Cholinesterase from the Liver of <i>Diodon hystrix</i> for Detection of Metal Ions. <i>Pertanika Journal of Science and Technology</i> , 2020 , 28,	1.1	
55	A Method for Diagnosing Organophosphate Pesticide Exposure in Humans using Liquid Chromatography Coupled Tandem Mass Spectrometry. <i>Journal of Analytical Toxicology</i> , 2020 ,	2.9	
54	Steady-state kinetic analysis of human cholinesterases over wide concentration ranges of competing substrates. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2022 , 1870, 140733	4	0
53	Ratiometric fluorescence assay for butyrylcholinesterase activity based on a hemicyanine and its application in biological imaging. <i>Dyes and Pigments</i> , 2022 , 197, 109874	4.6	1
52	Butyrylcholinesterase as a biomarker in Alzheimer's disease. 2020 , 263-280		0
51	Effect of Prenatal Hypoxia on Activity of the Soluble Forms of Cholinesterases in Rat Brain Structures during Early Postnatal Ontogenesis. <i>Journal of Evolutionary Biochemistry and Physiology</i> , 2020 , 56, 531-540	0.5	3
50	Long-Chain Acylcholines Link Butyrylcholinesterase to Regulation of Non-neuronal Cholinergic Signaling. <i>Journal of Proteome Research</i> , 2021 ,	5.6	0
49	Ultrasensitive detection of butyrylcholinesterase activity based on self-polymerization modulated fluorescence of sulfur quantum dots.. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2021 , 269, 120756	4.4	1
48	Redox-Regulated Synthesis of Fluorescent Polydopamine Nanoparticles for Detection of Butyrylcholinesterase Activity. <i>SSRN Electronic Journal</i> ,	1	
47	Aortic butyrylcholinesterase is reduced in spontaneously hypertensive rats. <i>Physiological Research</i> , 2021 , 70, 809-813	2.1	
46	Coronary Heart Disease in Type 2 Diabetes Mellitus: Genetic Factors and Their Mechanisms, Gene-Gene, and Gene-Environment Interactions in the Asian Populations.. <i>International Journal of Environmental Research and Public Health</i> , 2022 , 19,	4.6	2
45	Identification of sulfonamide based butyrylcholinesterase inhibitors through scaffold hopping approach.. <i>International Journal of Biological Macromolecules</i> , 2022 ,	7.9	2
44	Real-Time Fluorescent Determination and Biological Imaging in Living Models via a Butyrylcholinesterase-Activated Fluorescent Probe. <i>SSRN Electronic Journal</i> ,	1	
43	Identification of Novel Molecular Targets of Four Microcystin Variants by High-Throughput Virtual Screening. <i>Applied Sciences (Switzerland)</i> , 2022 , 12, 2612	2.6	1

42	From tryptophan-based amides to tertiary amines: Optimization of a butyrylcholinesterase inhibitor series.. <i>European Journal of Medicinal Chemistry</i> , 2022 , 234, 114248	6.8	0
41	High-throughput optical assays for sensing serine hydrolases in living systems and their applications. <i>TrAC - Trends in Analytical Chemistry</i> , 2022 , 116620	14.6	1
40	Clinical value of serum cholinesterase levels in Nephrotic syndrome: an observational study.. <i>BMC Nephrology</i> , 2022 , 23, 128	2.7	0
39	Redox-regulated synthesis of fluorescent polydopamine nanoparticles for detection of butyrylcholinesterase activity.. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2022 , 274, 121097	4.4	0
38	B-esterases characterisation in the digestive tract of the common octopus and the European cuttlefish and their in vitro responses to contaminants of environmental concern.. <i>Environmental Research</i> , 2022 , 210, 112961	7.9	0
37	DataSheet1.PDF. 2018 ,		
36	Presentation_1.PDF. 2018 ,		
35	Ratiometric imaging of butyrylcholinesterase activity in mice with nonalcoholic fatty liver using an AIE-based fluorescent probe.. <i>Journal of Materials Chemistry B</i> , 2022 ,	7.3	1
34	Crystal structure of human acetylcholinesterase in complex with tacrine: Implications for drug discovery.. <i>International Journal of Biological Macromolecules</i> , 2022 , 210, 172-181	7.9	1
33	Butyrylcholinesterase is a potential biomarker for Sudden Infant Death Syndrome.. <i>EBioMedicine</i> , 2022 , 80, 104041	8.8	2
32	Carbamate-based N-Substituted Tryptamine Derivatives as Novel Pleiotropic Molecules for Alzheimer's Disease. <i>Bioorganic Chemistry</i> , 2022 , 105844	5.1	0
31	Design and production strategies for developing a recombinant butyrylcholinesterase medical countermeasure for Organophosphorus poisoning. <i>Chemico-Biological Interactions</i> , 2022 , 109996	5	0
30	Identification of sulfonamide-based butyrylcholinesterase inhibitors using machine learning. <i>Future Medicinal Chemistry</i> ,	4.1	
29	Black and non-black population: investigation of the difference in butyrylcholinesterase activity in a healthy population in Salvador, Bahia. <i>Irish Journal of Medical Science</i> ,	1.9	
28	Analysis of Variability of Functionals of Recombinant Protein Production Trajectories Based on Limited Data. <i>International Journal of Molecular Sciences</i> , 2022 , 23, 7628	6.3	
27	Real-time fluorescent determination and biological imaging in living models via a butyrylcholinesterase-activated fluorescent probe. <i>Dyes and Pigments</i> , 2022 , 110596	4.6	0
26	Time-dependent effects of storage at 80 °C on the stability of butyrylcholinesterase activity in human serum. <i>Practical Laboratory Medicine</i> , 2022 , 31, e00298	1.7	
25	Rethinking common solvents in butyrylcholinesterase activity assays. <i>Inorganic Chemistry Communication</i> , 2022 , 143, 109796	3.1	

24	Mulberry leaves juice attenuates arsenic-induced neurobehavioral and hepatic disorders in mice.	1
23	Nerve agents surrogates: synthetic approaches and uses thereof for analytical and toxicological purposes. 2023 , 659-686	0
22	Evaluation of Activity of Sesquiterpene Lactones and Chicory Extracts as Acetylcholinesterase Inhibitors Assayed in Calorimetric and Docking Simulation Studies. 2022 , 14, 3633	1
21	Altered levels of variant cholinesterase transcripts contribute to the imbalanced cholinergic signaling in Alzheimer's and Parkinson's disease. 15,	0
20	Privileged multi-target directed propargyl-tacrines combining cholinesterase and monoamine oxidase inhibition activities. 2022 , 37, 2605-2620	0
19	The role of butyrylcholinesterase in the regulation of cognitive dysfunction in minimal hepatic encephalopathy: A potential blood marker of disease evolution. 13,	0
18	Toxicokinetics of plasmatic VX in a swine model: comparison of a simple enzymatic titration method with a mass spectrometry method.	0
17	A far-red/near-infrared fluorescence probe with large Stokes shift for monitoring butyrylcholinesterase (BChE) in living cells and in vivo. 2022 , 1235, 340540	0
16	Recent advances in enzyme inhibition based-electrochemical biosensors for pharmaceutical and environmental analysis. 2023 , 253, 124092	0
15	In vitro evaluation of anti-diabetic, anti-dementia, and antioxidant activity of <i>Artemisia capillaris</i> fermented by <i>Leuconostoc</i> spp. 2022 , 114163	0
14	Inhibitory Action of Omega-3 and Omega-6 Fatty Acids Alpha-Linolenic, Arachidonic and Linoleic acid on Human Erythrocyte Acetylcholinesterase.	0
13	Pseudo-irreversible butyrylcholinesterase inhibitors: Structure-activity relationships, computational and crystallographic study of the N-dialkyl O-arylcarbamate warhead. 2022 , 115048	0
12	Mechanisms and implications in gene polymorphisms mediated diverse responses to sedatives, analgesics and muscle relaxants.	0
11	Human butyrylcholinesterase in Cohn fraction IV-4 purified in a single chromatography step on Hupresin. 2023 , 18, e0280380	0
10	Molecular and Computational Analysis Identify Statins as Selective Inhibitors of Human Butyrylcholinesterase.	0
9	Dysregulation of butyrylcholinesterase, BCHE gene SNP rs1803274, and pro-inflammatory cytokines in occupational workers. 2023 , 220, 115195	0
8	The first and the second types of diabetes mellitus, autoimmune and non-autoimmune thyroiditis differential diagnosis possibility using the calculated index based on plasma butyrylcholinesterase isoforms activity. 2022 , 22, 61-72	0
7	Relationship between Butyrylcholinesterase Activity and Cognitive Ability in Workers Exposed to Chlorpyrifos. 2023 , 9, 12	0

- 6 Potential revival of cholinesterase inhibitors as drugs in veterinary medicine. 10,
- 5 Highly selective butyrylcholinesterase inhibitors related to Amaryllidaceae alkaloids - Design, synthesis, and biological evaluation. **2023**, 252, 115301
- 4 Exploiting butyrylcholinesterase inhibitors through a combined 3-D pharmacophore modeling, QSAR, molecular docking, and molecular dynamics investigation. **2023**, 13, 9513-9529
- 3 Synthesis and biological evaluation of substituted acetamide derivatives as potential butyrylcholinestrse inhibitors. **2023**, 13,
- 2 Identification of Potent and Selective Acetylcholinesterase/Butyrylcholinesterase Inhibitors by Virtual Screening.
- 1 Exploring the hub genes and mechanisms of *Daphne altaica*. treating esophageal squamous cell carcinoma based on Network Pharmacology and Bioinformatics Analysis.