DNA deaminases induce break-associated mutation sho and 3A in breast cancer kataegis

ELife

2, e00534

DOI: 10.7554/elife.00534

Citation Report

#	Article	IF	Citations
1	Signatures of mutational processes in human cancer. Nature, 2013, 500, 415-421.	13.7	8,060
2	The choice of nucleotide inserted opposite abasic sites formed within chromosomal DNA reveals the polymerase activities participating in translesion DNA synthesis. DNA Repair, 2013, 12, 878-889.	1.3	68
3	APOBEC3B mutagenesis in cancer. Nature Genetics, 2013, 45, 964-965.	9.4	89
4	Emerging patterns of somatic mutations in cancer. Nature Reviews Genetics, 2013, 14, 703-718.	7.7	442
5	APOBEC3B Upregulation and Genomic Mutation Patterns in Serous Ovarian Carcinoma. Cancer Research, 2013, 73, 7222-7231.	0.4	153
6	Genome-Wide Mutation Avalanches Induced in Diploid Yeast Cells by a Base Analog or an APOBEC Deaminase. PLoS Genetics, 2013, 9, e1003736.	1.5	54
7	A Biochemical Analysis Linking APOBEC3A to Disparate HIV-1 Restriction and Skin Cancer. Journal of Biological Chemistry, 2013, 288, 29294-29304.	1.6	42
8	A Mathematical Model for Scanning and Catalysis on Single-stranded DNA, Illustrated with Activation-induced Deoxycytidine Deaminase. Journal of Biological Chemistry, 2013, 288, 29786-29795.	1.6	25
10	Human APOBEC3A Isoforms Translocate to the Nucleus and Induce DNA Double Strand Breaks Leading to Cell Stress and Death. PLoS ONE, 2013, 8, e73641.	1.1	75
11	Interaction of APOBEC3A with DNA Assessed by Atomic Force Microscopy. PLoS ONE, 2014, 9, e99354.	1.1	21
12	Diverse modes of genomic alteration in hepatocellular carcinoma. Genome Biology, 2014, 15, 436.	3.8	100
13	APOBEC3 signature mutations in chronic lymphocytic leukemia. Leukemia, 2014, 28, 1929-1932.	3.3	20
14	Is homologous recombination really an error-free process?. Frontiers in Genetics, 2014, 5, 175.	1.1	106
15	APOBEC3B gene overexpression in non-small-cell lung cancer. Biomedical Reports, 2014, 2, 392-395.	0.9	26
16	C. elegans whole-genome sequencing reveals mutational signatures related to carcinogens and DNA repair deficiency. Genome Research, 2014, 24, 1624-1636.	2.4	164
17	Targeting Of Somatic Hypermutation By immunoglobulin Enhancer And Enhancer-Like Sequences. PLoS Biology, 2014, 12, e1001831.	2.6	51
18	Human Papillomavirus E6 Triggers Upregulation of the Antiviral and Cancer Genomic DNA Deaminase APOBEC3B. MBio, 2014, 5, .	1.8	172
19	Genome Destabilizing Mutator Alleles Drive Specific Mutational Trajectories inSaccharomyces cerevisiae. Genetics, 2014, 196, 403-412.	1.2	22

#	Article	IF	Citations
20	B Cell Super-Enhancers and Regulatory Clusters Recruit AID Tumorigenic Activity. Cell, 2014, 159, 1524-1537.	13.5	234
21	Hypermutation in human cancer genomes: footprints and mechanisms. Nature Reviews Cancer, 2014, 14, 786-800.	12.8	354
22	Michael S. Neuberger 1953-2013. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 2862-2863.	3.3	0
23	The 9-1-1 checkpoint clamp stimulates DNA resection by Dna2-Sgs1 and Exo1. Nucleic Acids Research, 2014, 42, 10516-10528.	6.5	46
24	Breast Cancer. Advances in Anatomic Pathology, 2014, 21, 373-381.	2.4	18
25	Structural determinants of human APOBEC3A enzymatic and nucleic acid binding properties. Nucleic Acids Research, 2014, 42, 1095-1110.	6.5	68
26	Host restriction of murine gammaherpesvirus 68 replication by human APOBEC3 cytidine deaminases but not murine APOBEC3. Virology, 2014, 454-455, 215-226.	1.1	20
27	Mutational signatures: the patterns of somatic mutations hidden in cancer genomes. Current Opinion in Genetics and Development, 2014, 24, 52-60.	1.5	393
28	Historical Perspective and Current Challenges of Cancer Genomics. , 2014, , 3-10.		0
29	The emerging role of RNA and DNA editing in cancer. Biochimica Et Biophysica Acta: Reviews on Cancer, 2014, 1845, 308-316.	3.3	26
30	Clustered and genomeâ€wide transient mutagenesis in human cancers: Hypermutation without permanent mutators or loss of fitness. BioEssays, 2014, 36, 382-393.	1.2	48
31	Breast Cancer Genomics. , 2014, , 213-232.		4
32	The evolution of the unstable cancer genome. Current Opinion in Genetics and Development, 2014, 24, 61-67.	1.5	62
33	APOBEC3 Deaminases Induce Hypermutation in Human Papillomavirus 16 DNA upon Beta Interferon Stimulation. Journal of Virology, 2014, 88, 1308-1317.	1.5	84
34	Evidence of a cancer type-specific distribution for consecutive somatic mutation distances. Computational Biology and Chemistry, 2014, 53, 79-83.	1.1	8
35	A computational analysis of the structural determinants of APOBEC3â€™s catalytic activity and vulnerability to HIV-1 Vif. Virology, 2014, 471-473, 105-116.	1.1	23
36	Genomic catastrophes frequently arise in esophageal adenocarcinoma and drive tumorigenesis. Nature Communications, 2014, 5, 5224.	5.8	236
37	Elevated APOBEC3B Correlates with Poor Outcomes for Estrogen-Receptor-Positive Breast Cancers. Hormones and Cancer, 2014, 5, 405-413.	4.9	140

#	Article	IF	Citations
38	Expression Profiling of Genes Modulated by Minocycline in a Rat Model of Neuropathic Pain. Molecular Pain, 2014, 10, 1744-8069-10-47.	1.0	40
39	The RNA editing enzyme APOBEC1 induces somatic mutations and a compatible mutational signature is present in esophageal adenocarcinomas. Genome Biology, 2014, 15, 417.	3.8	85
40	Association of a germline copy number polymorphism of APOBEC3A and APOBEC3B with burden of putative APOBEC-dependent mutations in breast cancer. Nature Genetics, 2014, 46, 487-491.	9.4	254
41	Mechanisms underlying mutational signatures in human cancers. Nature Reviews Genetics, 2014, 15, 585-598.	7.7	703
42	Error-free versus mutagenic processing of genomic uracilâ€"Relevance to cancer. DNA Repair, 2014, 19, 38-47.	1.3	55
43	Break-Induced Replication Is a Source of Mutation Clusters Underlying Kataegis. Cell Reports, 2014, 7, 1640-1648.	2.9	143
44	The eQTL-missense polymorphisms of APOBEC3H are associated with lung cancer risk in a Han Chinese population. Scientific Reports, 2015, 5, 14969.	1.6	15
45	Comprehensive establishment and characterization of orthoxenograft mouse models of malignant peripheral nerve sheath tumors for personalized medicine. EMBO Molecular Medicine, 2015, 7, 608-627.	3.3	36
46	DNA cytosine and methylcytosine deamination by APOBEC3B: enhancing methylcytosine deamination by engineering APOBEC3B. Biochemical Journal, 2015, 471, 25-35.	1.7	45
47	Chronic Lung Injury by Constitutive Expression of Activation-Induced Cytidine Deaminase Leads to Focal Mucous Cell Metaplasia and Cancer. PLoS ONE, 2015, 10, e0117986.	1.1	11
48	APOBEC3 Interference during Replication of Viral Genomes. Viruses, 2015, 7, 2999-3018.	1.5	34
49	Managing Single-Stranded DNA during Replication Stress in Fission Yeast. Biomolecules, 2015, 5, 2123-2139.	1.8	25
50	APOBEC3A Is Implicated in a Novel Class of G-to-A mRNA Editing in WT1 Transcripts. PLoS ONE, 2015, 10, e0120089.	1.1	40
51	Mutagenesis by AID: Being in the Right Place at the Right Time. PLoS Genetics, 2015, 11, e1005489.	1.5	2
52	FHIT loss-induced DNA damage creates optimal APOBEC substrates: Insights into APOBEC-mediated mutagenesis. Oncotarget, 2015, 6, 3409-3419.	0.8	27
53	AID/APOBEC deaminases and cancer. Oncoscience, 2015, 2, 320-333.	0.9	105
54	From Mutational Mechanisms in Single Cells to Mutational Patterns in Cancer Genomes. Cold Spring Harbor Symposia on Quantitative Biology, 2015, 80, 117-137.	2.0	11
55	Specific induction of endogenous viral restriction factors using CRISPR/Cas-derived transcriptional activators. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E7249-56.	3.3	45

#	Article	IF	Citations
56	Clusters of Multiple Mutations: Incidence and Molecular Mechanisms. Annual Review of Genetics, 2015, 49, 243-267.	3.2	116
57	Activation-induced deoxycytidine deaminase (AID) co-transcriptional scanning at single-molecule resolution. Nature Communications, 2015, 6, 10209.	5.8	33
58	APOBEC3B expression in breast cancer reflects cellular proliferation, while a deletion polymorphism is associated with immune activation. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 2841-2846.	3.3	118
59	The DNA Deamination Model of Somatic Antibody Diversification. Journal of Immunology, 2015, 194, 2041-2042.	0.4	0
60	Role of the double-strand break repair pathway in the maintenance of genomic stability. Molecular and Cellular Oncology, 2015, 2, e968020.	0.3	21
61	Disruption of Transcriptional Coactivator Sub1 Leads to Genome-Wide Re-distribution of Clustered Mutations Induced by APOBEC in Active Yeast Genes. PLoS Genetics, 2015, 11, e1005217.	1.5	49
62	Genetic Intratumor Heterogeneity. , 2015, , 571-593.		2
63	DNA Polymerase Î¶-Dependent Lesion Bypass in Saccharomyces cerevisiae Is Accompanied by Error-Prone Copying of Long Stretches of Adjacent DNA. PLoS Genetics, 2015, 11, e1005110.	1.5	36
64	Molecular mechanism and clinical impact of APOBEC3B-catalyzed mutagenesis in breast cancer. Breast Cancer Research, 2015, 17, 8.	2.2	82
65	Breaking bad: The mutagenic effect of DNA repair. DNA Repair, 2015, 32, 43-51.	1.3	19
66	Dissecting genetic and environmental mutation signatures with model organisms. Trends in Genetics, 2015, 31, 465-474.	2.9	16
67	APOBEC3 genes: retroviral restriction factors to cancer drivers. Trends in Molecular Medicine, 2015, 21, 274-284.	3.5	102
68	Genomic approaches to DNA repair and mutagenesis. DNA Repair, 2015, 36, 146-155.	1.3	30
69	The Diverse Effects of Complex Chromosome Rearrangements and Chromothripsis in Cancer Development. Recent Results in Cancer Research, 2015, 200, 165-193.	1.8	13
70	An APOBEC3A hypermutation signature is distinguishable from the signature of background mutagenesis by APOBEC3B in human cancers. Nature Genetics, 2015, 47, 1067-1072.	9.4	354
71	APOBEC3B-Mediated Cytidine Deamination Is Required for Estrogen Receptor Action in Breast Cancer. Cell Reports, 2015, 13, 108-121.	2.9	105
72	Chromothripsis: A New Mechanism for Rapid Karyotype Evolution. Annual Review of Genetics, 2015, 49, 183-211.	3.2	155
73	APOBEC3A Functions as a Restriction Factor of Human Papillomavirus. Journal of Virology, 2015, 89, 688-702.	1.5	160

#	Article	IF	Citations
74	AID in Somatic Hypermutation and Class Switch Recombination. , 2016, , 115-125.		0
75	The 29.5 kb APOBEC3B Deletion Polymorphism Is Not Associated with Clinical Outcome of Breast Cancer. PLoS ONE, 2016, 11, e0161731.	1.1	15
76	Kataegis Expression Signature in Breast Cancer Is Associated with Late Onset, Better Prognosis, and Higher HER2 Levels. Cell Reports, 2016, 16, 672-683.	2.9	33
77	Mutation at a distance caused by homopolymeric guanine repeats in Saccharomyces cerevisiae. Science Advances, 2016, 2, e1501033.	4.7	8
78	Fragile Genes That Are Frequently Altered in Cancer: Players Not Passengers. Cytogenetic and Genome Research, 2016, 150, 208-216.	0.6	31
79	Chromosome Imbalances in Cancer: Molecular Cytogenetics Meets Genomics. Cytogenetic and Genome Research, 2016, 150, 176-184.	0.6	11
80	Activation induced deaminase mutational signature overlaps with CpG methylation sites in follicular lymphoma and other cancers. Scientific Reports, 2016, 6, 38133.	1.6	26
81	APOBEC3B expression in human leptomeninges and meningiomas. Oncology Letters, 2016, 12, 5344-5348.	0.8	1
82	Understanding mutagenesis through delineation of mutational signatures in human cancer. Carcinogenesis, 2016, 37, 531-540.	1.3	90
83	Re-Evaluating Clonal Dominance in Cancer Evolution. Trends in Cancer, 2016, 2, 263-276.	3.8	39
84	Coupling end resection with the checkpoint response at DNA double-strand breaks. Cellular and Molecular Life Sciences, 2016, 73, 3655-3663.	2.4	30
85	Nuclear Magnetic Resonance Structure of the APOBEC3B Catalytic Domain: Structural Basis for Substrate Binding and DNA Deaminase Activity. Biochemistry, 2016, 55, 2944-2959.	1.2	55
86	Roles for retrotransposon insertions in human disease. Mobile DNA, 2016, 7, 9.	1.3	499
87	Germinal Center B-Cell-Associated Nuclear Protein (GANP) Involved in RNA Metabolism for B Cell Maturation. Advances in Immunology, 2016, 131, 135-186.	1.1	6
88	Epsteinâ€“Barr Virus Infection of Mammary Epithelial Cells Promotes Malignant Transformation. EBioMedicine, 2016, 9, 148-160.	2.7	61
89	Functions and Malfunctions of Mammalian DNA-Cytosine Deaminases. Chemical Reviews, 2016, 116, 12688-12710.	23.0	104
90	Vif Proteins from Diverse Human Immunodeficiency Virus/Simian Immunodeficiency Virus Lineages Have Distinct Binding Sites in A3C. Journal of Virology, 2016, 90, 10193-10208.	1.5	13
91	Biochemical Characterization of APOBEC3H Variants: Implications for Their HIV-1 Restriction Activity and mC Modification. Journal of Molecular Biology, 2016, 428, 4626-4638.	2.0	23

#	Article	IF	Citations
92	Eukaryotic DNA Polymerases in Homologous Recombination. Annual Review of Genetics, 2016, 50, 393-421.	3.2	121
93	DNA replication stress mediates APOBEC3 family mutagenesis in breast cancer. Genome Biology, 2016, 17, 185.	3.8	140
94	Evidence for APOBEC3B mRNA and protein expression in oral squamous cell carcinomas. Experimental and Molecular Pathology, 2016, 101, 314-319.	0.9	10
95	Correlation of Apobec Mrna Expression with overall Survival and pd-l1 Expression in Urothelial Carcinoma. Scientific Reports, 2016, 6, 27702.	1.6	46
96	The DNA cytosine deaminase APOBEC3B promotes tamoxifen resistance in ER-positive breast cancer. Science Advances, 2016, 2, e1601737.	4.7	175
97	Engineering and optimising deaminase fusions for genome editing. Nature Communications, 2016, 7, 13330.	5.8	60
98	APOBEC3A and APOBEC3B Preferentially Deaminate the Lagging Strand Template during DNA Replication. Cell Reports, 2016, 14, 1273-1282.	2.9	173
99	High content screening application for cell-type specific behaviour in heterogeneous primary breast epithelial subpopulations. Breast Cancer Research, 2016, 18, 18.	2.2	9
100	Structural analysis of the activation-induced deoxycytidine deaminase required in immunoglobulin diversification. DNA Repair, 2016, 43, 48-56.	1.3	40
101	Mutational Strand Asymmetries in Cancer Genomes Reveal Mechanisms of DNA Damage and Repair. Cell, 2016, 164, 538-549.	13.5	363
102	APOBEC3B is an enzymatic source of molecular alterations in esophageal squamous cell carcinoma. Medical Oncology, 2016, 33, 26.	1.2	20
103	Mutations, kataegis and translocations in B cells: understanding AID promiscuous activity. Nature Reviews Immunology, 2016, 16, 164-176.	10.6	153
104	Mechanisms and Consequences of Cancer Genome Instability: Lessons from Genome Sequencing Studies. Annual Review of Pathology: Mechanisms of Disease, 2016, 11, 283-312.	9.6	106
105	Strand-biased cytosine deamination at the replication fork causes cytosine to thymine mutations in Escherichia coli. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 2176-2181.	3.3	94
106	APOBEC3A damages the cellular genome during DNA replication. Cell Cycle, 2016, 15, 998-1008.	1.3	69
107	PrimPol prevents APOBEC/AID family mediated DNA mutagenesis. Nucleic Acids Research, 2016, 44, 4734-4744.	6.5	40
108	APOBEC-induced mutations in human cancers are strongly enriched on the lagging DNA strand during replication. Genome Research, 2016, 26, 174-182.	2.4	156
109	DNA Editing by APOBECs: A Genomic Preserver and Transformer. Trends in Genetics, 2016, 32, 16-28.	2.9	64

#	Article	IF	Citations
110	Genomic hallmarks of localized, non-indolent prostate cancer. Nature, 2017, 541, 359-364.	13.7	462
111	Self-cytoplasmic DNA upregulates the mutator enzyme APOBEC3A leading to chromosomal DNA damage. Nucleic Acids Research, 2017, 45, gkx001.	6.5	23
112	Mutational signatures and mutable motifs in cancer genomes. Briefings in Bioinformatics, 2017, 19, 1085-1101.	3.2	32
113	Family-Wide Comparative Analysis of Cytidine and Methylcytidine Deamination by Eleven Human APOBEC Proteins. Journal of Molecular Biology, 2017, 429, 1787-1799.	2.0	64
114	APOBEC3A efficiently deaminates methylated, but not TET-oxidized, cytosine bases in DNA. Nucleic Acids Research, 2017, 45, 7655-7665.	6.5	65
115	Heat shock proteins stimulate APOBEC-3â€“mediated cytidine deamination in the hepatitis B virus. Journal of Biological Chemistry, 2017, 292, 13459-13479.	1.6	20
116	Elevated APOBEC3B expression drives a kataegic-like mutation signature and replication stress-related therapeutic vulnerabilities in p53-defective cells. British Journal of Cancer, 2017, 117, 113-123.	2.9	84
117	Mutational Signatures in Breast Cancer: The Problem at the DNA Level. Clinical Cancer Research, 2017, 23, 2617-2629.	3.2	102
118	APOBEC3B cytidine deaminase targets the non-transcribed strand of tRNA genes in yeast. DNA Repair, 2017, 53, 4-14.	1.3	37
119	Avoidance of APOBEC3B-induced mutation by error-free lesion bypass. Nucleic Acids Research, 2017, 45, 5243-5254.	6.5	25
120	APOBEC3A/B-induced mutagenesis is responsible for 20% of heritable mutations in the TpCpW context. Genome Research, 2017, 27, 175-184.	2.4	24
121	Multi-modality analysis supports APOBEC as a major source of mutations in head and neck squamous cell carcinoma. Oral Oncology, 2017, 74, 8-14.	0.8	46
122	APOBEC: From mutator to editor. Journal of Genetics and Genomics, 2017, 44, 423-437.	1.7	54
123	Mutational signatures efficiently identify different mutational processes underlying cancers with similar somatic mutation spectra. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 2017, 806, 27-30.	0.4	2
124	Clustered Mutation Signatures Reveal that Error-Prone DNA Repair Targets Mutations to Active Genes. Cell, 2017, 170, 534-547.e23.	13.5	173
125	Uracil Accumulation and Mutagenesis Dominated by Cytosine Deamination in CpG Dinucleotides in Mice Lacking UNG and SMUG1. Scientific Reports, 2017, 7, 7199.	1.6	43
126	*K-means and cluster models for cancer signatures. Biomolecular Detection and Quantification, 2017, 13, 7-31.	7.0	28
127	p53 controls expression of the DNA deaminase APOBEC3B to limit its potential mutagenic activity in cancer cells. Nucleic Acids Research, 2017, 45, 11056-11069.	6.5	70

#	Article	IF	Citations
128	APOBEC3A and APOBEC3B Activities Render Cancer Cells Susceptible to ATR Inhibition. Cancer Research, 2017, 77, 4567-4578.	0.4	104
129	Cytosine Deaminase APOBEC3A Sensitizes Leukemia Cells to Inhibition of the DNA Replication Checkpoint. Cancer Research, 2017, 77, 4579-4588.	0.4	48
130	Modelling Mutation Spectra of Human Carcinogens Using Experimental Systems. Basic and Clinical Pharmacology and Toxicology, 2017, 121, 16-22.	1.2	14
131	APOBEC3A associates with human papillomavirus genome integration in oropharyngeal cancers. Oncogene, 2017, 36, 1687-1697.	2.6	45
132	Somatic Host Cell Alterations in HPV Carcinogenesis. Viruses, 2017, 9, 206.	1.5	55
133	The Complex Interplay between DNA Injury and Repair in Enzymatically Induced Mutagenesis and DNA Damage in B Lymphocytes. International Journal of Molecular Sciences, 2017, 18, 1876.	1.8	19
134	Living Organisms Author Their Read-Write Genomes in Evolution. Biology, 2017, 6, 42.	1.3	44
135	Genomic Destabilization Triggered by Replication Stress during Senescence. Cancers, 2017, 9, 159.	1.7	4
136	Risks at the DNA Replication Fork: Effects upon Carcinogenesis and Tumor Heterogeneity. Genes, 2017, 8, 46.	1.0	27
137	Recombination Is Responsible for the Increased Recovery of Drug-Resistant Mutants with Hypermutated Genomes in Resting Yeast Diploids Expressing APOBEC Deaminases. Frontiers in Genetics, 2017, 8, 202.	1.1	5
138	Differential Evolution of Antiretroviral Restriction Factors in Pteropid Bats as Revealed by APOBEC3 Gene Complexity. Molecular Biology and Evolution, 2018, 35, 1626-1637.	3.5	59
139	Human Papillomavirus 16 E7 Stabilizes APOBEC3A Protein by Inhibiting Cullin 2-Dependent Protein Degradation. Journal of Virology, 2018, 92, .	1.5	48
140	Biochemical Basis of APOBEC3 Deoxycytidine Deaminase Activity on Diverse DNA Substrates. ACS Infectious Diseases, 2018, 4, 224-238.	1.8	38
141	Correlation of gene expression and associated mutation profiles of APOBEC3A, APOBEC3B, REV1, UNG, and FHIT with chemosensitivity of cancer cell lines to drug treatment. Human Genomics, 2018, 12, 20.	1.4	11
142	APOBEC3 induces mutations during repair of CRISPRâ€“Cas9-generated DNA breaks. Nature Structural and Molecular Biology, 2018, 25, 45-52.	3.6	42
143	RNA-Mediated Dimerization of the Human Deoxycytidine Deaminase APOBEC3H Influences Enzyme Activity and Interaction with Nucleic Acids. Journal of Molecular Biology, 2018, 430, 4891-4907.	2.0	16
144	Non-coding Class Switch Recombination-Related Transcription in Human Normal and Pathological Immune Responses. Frontiers in Immunology, 2018, 9, 2679.	2.2	4
145	Maftools: efficient and comprehensive analysis of somatic variants in cancer. Genome Research, 2018, 28, 1747-1756.	2.4	2,614

#	Article	IF	Citations
146	Substrate sequence selectivity of APOBEC3A implicates intra-DNA interactions. Scientific Reports, 2018, 8, 7511.	1.6	47
147	Generation of Genomic Alteration from Cytidine Deamination. Advances in Experimental Medicine and Biology, 2018, 1044, 49-64.	0.8	11
148	APOBEC and ADAR deaminases may cause many single nucleotide polymorphisms curated in the OMIM database. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 2018, 810, 33-38.	0.4	9
149	Strategy of Human Cytomegalovirus To Escape Interferon Beta-Induced APOBEC3G Editing Activity. Journal of Virology, 2018, 92, .	1.5	19
150	Chromatin loop anchors are associated with genome instability in cancer and recombination hotspots in the germline. Genome Biology, 2018, 19, 101.	3.8	43
151	Clinical implications of the non-luminal intrinsic subtypes in hormone receptor-positive breast cancer. Cancer Treatment Reviews, 2018, 67, 63-70.	3.4	79
152	Impact of DNA lesion repair, replication and formation on the mutational spectra of environmental carcinogens: Aflatoxin B1 as a case study. DNA Repair, 2018, 71, 12-22.	1.3	28
153	Identifying Putative Susceptibility Genes and Evaluating Their Associations with Somatic Mutations in Human Cancers. American Journal of Human Genetics, 2019, 105, 477-492.	2.6	27
154	Hidden Markov models lead to higher resolution maps of mutation signature activity in cancer. Genome Medicine, 2019, 11, 49.	3.6	22
155	Genome-wide mapping of regions preferentially targeted by the human DNA-cytosine deaminase APOBEC3A using uracil-DNA pulldown and sequencing. Journal of Biological Chemistry, 2019, 294, 15037-15051.	1.6	18
156	Induction of APOBEC3C Facilitates the Genotoxic Stress-Mediated Cytotoxicity of Artesunate. Chemical Research in Toxicology, 2019, 32, 2526-2537.	1.7	3
157	The deaminase APOBEC3B triggers the death of cells lacking uracil DNA glycosylase. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 22158-22163.	3.3	34
158	SigProfilerMatrixGenerator: a tool for visualizing and exploring patterns of small mutational events. BMC Genomics, 2019, 20, 685.	1.2	162
159	The spectrum of APOBEC3 activity: From anti-viral agents to anti-cancer opportunities. DNA Repair, 2019, 83, 102700.	1.3	65
160	Integrative genomic analyses of APOBEC-mutational signature, expression and germline deletion of APOBEC3 genes, and immunogenicity in multiple cancer types. BMC Medical Genomics, 2019, 12, 131.	0.7	47
161	Repair of multiple simultaneous double-strand breaks causes bursts of genome-wide clustered hypermutation. PLoS Biology, 2019, 17, e3000464.	2.6	35
162	Somatic mutational signatures in polyposis and colorectal cancer. Molecular Aspects of Medicine, 2019, 69, 62-72.	2.7	14
163	Endogenous APOBEC3B Overexpression Constitutively Generates DNA Substitutions and Deletions in Myeloma Cells. Scientific Reports, 2019, 9, 7122.	1.6	28

#	Article	IF	Citations
164	Guidelines for DNA recombination and repair studies: Cellular assays of DNA repair pathways. Microbial Cell, 2019, 6, 1-64.	1.4	47
165	Development and Application of Base Editors. CRISPR Journal, 2019, 2, 91-104.	1.4	46
166	No genome is an island: toward a 21st century agenda for evolution. Annals of the New York Academy of Sciences, 2019, 1447, 21-52.	1.8	24
167	APOBEC Mutagenesis and Copy-Number Alterations Are Drivers of Proteogenomic Tumor Evolution and Heterogeneity in Metastatic Thoracic Tumors. Cell Reports, 2019, 26, 2651-2666.e6.	2.9	92
168	Characterizing Mutational Signatures in Human Cancer Cell Lines Reveals Episodic APOBEC Mutagenesis. Cell, 2019, 176, 1282-1294.e20.	13.5	298
169	Chromosome segregation errors generate a diverse spectrum of simple and complex genomic rearrangements. Nature Genetics, 2019, 51, 705-715.	9.4	145
170	Nucleotide Weight Matrices Reveal Ubiquitous Mutational Footprints of AID/APOBEC Deaminases in Human Cancer Genomes. Cancers, 2019, 11, 211.	1.7	15
171	Pichia pastoris as a host for production and isolation of mutagenic AID/APOBEC enzymes involved in cancer and immunity. New Biotechnology, 2019, 51, 67-79.	2.4	7
172	APOBEC3A is a prominent cytidine deaminase in breast cancer. PLoS Genetics, 2019, 15, e1008545.	1.5	90
173	Structural Analysis of the Active Site and DNA Binding of Human Cytidine Deaminase APOBEC3B. Journal of Chemical Theory and Computation, 2019, 15, 637-647.	2.3	16
174	A Tumor-Promoting Phorbol Ester Causes a Large Increase in APOBEC3A Expression and a Moderate Increase in APOBEC3B Expression in a Normal Human Keratinocyte Cell Line without Increasing Genomic Uracils. Molecular and Cellular Biology, 2019, 39, .	1.1	22
175	Mechanisms shaping the mutational landscape of the FRA3B/FHITâ€deficient cancer genome. Genes Chromosomes and Cancer, 2019, 58, 317-323.	1.5	12
176	Distribution and difference of APOBECâ€induced mutations in the TpCpW context of HBV DNA between HCC and nonâ€HCC. Journal of Medical Virology, 2020, 92, 53-61.	2.5	5
177	APOBEC3B reporter myeloma cell lines identify DNA damage response pathways leading to APOBEC3B expression. PLoS ONE, 2020, 15, e0223463.	1.1	11
178	Comprehensive Mapping of Key Regulatory Networks that Drive Oncogene Expression. Cell Reports, 2020, 33, 108426.	2.9	14
179	Nuclear Membrane Rupture and Its Consequences. Annual Review of Cell and Developmental Biology, 2020, 36, 85-114.	4.0	83
180	DNA mismatch repair promotes APOBEC3-mediated diffuse hypermutation in human cancers. Nature Genetics, 2020, 52, 958-968.	9.4	76
181	Multiregional wholeâ€genome sequencing of hepatocellular carcinoma with noduleâ€inâ€nodule appearance reveals stepwise cancer evolution. Journal of Pathology, 2020, 252, 398-410.	2.1	15

#	Article	IF	Citations
182	Involvement of APOBEC3B in mutation induction by irradiation. Journal of Radiation Research, 2020, 61, 819-827.	0.8	5
183	Genetic Heterogeneity Between Paired Primary and Brain Metastases in Lung Adenocarcinoma. Clinical Medicine Insights: Oncology, 2020, 14, 117955492094733.	0.6	9
184	Footprint of the host restriction factors APOBEC3 on the genome of human viruses. PLoS Pathogens, 2020, 16, e1008718.	2.1	56
185	Deaminase-Independent Mode of Antiretroviral Action in Human and Mouse APOBEC3 Proteins. Microorganisms, 2020, 8, 1976.	1.6	13
186	Retroviruses drive the rapid evolution of mammalian APOBEC3 genes. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 610-618.	3.3	77
187	Distinct immune evasion in <scp>APOBEC</scp>â€enriched, <scp>HPV</scp>â€negative <scp>HNSCC</scp>. International Journal of Cancer, 2020, 147, 2293-2302.	2.3	10
188	Quantification of ongoing APOBEC3A activity in tumor cells by monitoring RNA editing at hotspots. Nature Communications, 2020, 11, 2971.	5.8	71
189	Finding the hot spot: identifying immune sensitive gastrointestinal tumors. Translational Gastroenterology and Hepatology, 2020, 5, 48-48.	1.5	6
190	Genomic Instability in Multiple Myeloma. Trends in Cancer, 2020, 6, 858-873.	3.8	18
191	Molecular origins of APOBEC-associated mutations in cancer. DNA Repair, 2020, 94, 102905.	1.3	48
192	Analysis of APOBEC-induced mutations in yeast strains with low levels of replicative DNA polymerases. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 9440-9450.	3.3	22
193	Pan-cancer analysis of advanced patient tumors reveals interactions between therapy and genomic landscapes. Nature Cancer, 2020, 1, 452-468.	5.7	103
194	Unraveling the genomic landscape of colorectal cancer through mutational signatures. Advances in Cancer Research, 2021, 151, 385-424.	1.9	14
195	Evolutionary Mechanisms of Cancer Suggest Rational Therapeutic Approaches. Cytogenetic and Genome Research, 2021, 161, 362-371.	0.6	4
196	Targeting translesion synthesis (TLS) to expose replication gaps, a unique cancer vulnerability. Expert Opinion on Therapeutic Targets, 2021, 25, 27-36.	1.5	16
197	Molecular correlates of immune cytolytic subgroups in colorectal cancer by integrated genomics analysis. NAR Cancer, 2021, 3, zcab005.	1.6	9
198	Clonal expansion in non-cancer tissues. Nature Reviews Cancer, 2021, 21, 239-256.	12.8	133
203	Distinct genomic features across cytolytic subgroups in skin melanoma. Cancer Immunology, Immunotherapy, 2021, 70, 3137-3154.	2.0	12

#	Article	IF	Citations
204	Insights into the Structures and Multimeric Status of APOBEC Proteins Involved in Viral Restriction and Other Cellular Functions. Viruses, 2021, 13, 497.	1.5	11
205	Loss of the abasic site sensor HMCES is synthetic lethal with the activity of the APOBEC3A cytosine deaminase in cancer cells. PLoS Biology, 2021, 19, e3001176.	2.6	25
207	Sustained high expression of multiple APOBEC3 cytidine deaminases in systemic lupus erythematosus. Scientific Reports, 2021, 11, 7893.	1.6	8
208	Stepwise generation of AID knock-in and conditional knockout mice from a single gene-targeting event. International Immunology, 2021, 33, 387-398.	1.8	0
209	Potential APOBEC-mediated RNA editing of the genomes of SARS-CoV-2 and other coronaviruses and its impact on their longer term evolution. Virology, 2021, 556, 62-72.	1.1	74
212	Infection of Bronchial Epithelial Cells by the Human Adenoviruses A12, B3, and C2 Differently Regulates the Innate Antiviral Effector APOBEC3B. Journal of Virology, 2021, 95, e0241320.	1.5	3
213	APOBEC3G rescues cells from the deleterious effects of DNA damage. FEBS Journal, 2021, 288, 6063-6077.	2.2	6
214	kataegis: an R package for identification and visualization of the genomic localized hypermutation regions using high-throughput sequencing. BMC Genomics, 2021, 22, 440.	1.2	6
216	Genotoxic stress and viral infection induce transient expression of APOBEC3A and pro-inflammatory genes through two distinct pathways. Nature Communications, 2021, 12, 4917.	5.8	28
217	Reverting to single-cell biology: The predictions of the atavism theory of cancer. Progress in Biophysics and Molecular Biology, 2021, 165, 49-55.	1.4	12
218	APOBEC3C, a nucleolar protein induced by genotoxins, is excluded from DNA damage sites. FEBS Journal, 2022, 289, 808-831.	2.2	5
219	The von Hippelâ€“Lindau Cullin-RING E3 ubiquitin ligase regulates APOBEC3 cytidine deaminases. Translational Research, 2021, 237, 1-15.	2.2	5
221	Mechanisms of Global and Region-Specific Control of Mutagenesis. , 2016, , 55-76.		2
222	Mechanisms of Mutation. , 2016, , 3-18.		1
223	Hypermutation in single-stranded DNA. DNA Repair, 2020, 91-92, 102868.	1.3	28
224	Induction of APOBEC3B expression by chemotherapy drugs is mediated by DNA-PK-directed activation of NF-Î°B. Oncogene, 2021, 40, 1077-1090.	2.6	18
225	The interesting relationship between APOBEC3 deoxycytidine deaminases and cancer: a long road ahead. Open Biology, 2020, 10, 200188.	1.5	27
228	Condition-specific RNA editing in the coral symbiont Symbiodinium microadriaticum. PLoS Genetics, 2017, 13, e1006619.	1.5	57

#	Article	IF	Citations
229	Fhit Deficiency-Induced Global Genome Instability Promotes Mutation and Clonal Expansion. PLoS ONE, 2013, 8, e80730.	1.1	27
230	Mutation Processes in 293-Based Clones Overexpressing the DNA Cytosine Deaminase APOBEC3B. PLoS ONE, 2016, 11, e0155391.	1.1	33
231	Expression of APOBEC3B mRNA in Primary Breast Cancer of Japanese Women. PLoS ONE, 2016, 11, e0168090.	1.1	17
232	The APOBEC3 genes and their role in cancer: insights from human papillomavirus. Journal of Molecular Endocrinology, 2019, 62, R269-R287.	1.1	33
233	The 30 kb deletion in the APOBEC3 cluster decreases APOBEC3A and APOBEC3B expression and creates a transcriptionally active hybrid gene but does not associate with breast cancer in the European population. Oncotarget, 2017, 8, 76357-76374.	0.8	26
234	APOBEC3B gene expression as a novel predictive factor for pathological complete response to neoadjuvant chemotherapy in breast cancer. Oncotarget, 2018, 9, 30513-30526.	0.8	6
235	Degradation of the cancer genomic DNA deaminase APOBEC3B by SIV Vif. Oncotarget, 2015, 6, 39969-39979.	0.8	17
236	Towards tumor immunodiagnostics. Annals of Translational Medicine, 2016, 4, 263-263.	0.7	11
237	APOBEC3B: Pathological consequences of an innate immune DNA mutator. Biomedical Journal, 2015, 38, 102.	1.4	54
238	Engineered proteins detect spontaneous DNA breakage in human and bacterial cells. ELife, 2013, 2, e01222.	2.8	105
239	Repair of naturally occurring mismatches can induce mutations in flanking DNA. ELife, 2014, 3, e02001.	2.8	80
240	APOBEC3A deaminates transiently exposed single-strand DNA during LINE-1 retrotransposition. ELife, 2014, 3, e02008.	2.8	113
241	Induction of homologous recombination between sequence repeats by the activation induced cytidine deaminase (AID) protein. ELife, 2014, 3, e03110.	2.8	4
242	Active RNAP pre-initiation sites are highly mutated by cytidine deaminases in yeast, with AID targeting small RNA genes. ELife, 2014, 3, e03553.	2.8	51
243	5-hydroxymethylcytosine marks regions with reduced mutation frequency in human DNA. ELife, 2016, 5, .	2.8	28
244	Perturbation of base excision repair sensitizes breast cancer cells to APOBEC3 deaminase-mediated mutations. ELife, 2020, 9, .	2.8	13
245	Characterization of the mechanism by which the RB/E2F pathway controls expression of the cancer genomic DNA deaminase APOBEC3B. ELife, 2020, 9, .	2.8	25
250	APOBEC as an Endogenous Mutagen in Cancers of the Head and Neck. Current Cancer Research, 2018, , 275-292.	0.2	0

#	Article	IF	Citations
251	APOBEC Mutagenesis and Copy Number Alterations are Drivers of Proteogenomic Tumor Evolution and Heterogeneity in Metastatic Thoracic Tumors. SSRN Electronic Journal, 0, , .	0.4	1
253	Risks and chances of aberrant DNA repair in cancer. Oncoscience, 2018, 5, 256-257.	0.9	0
262	New Horizons in the Treatment of Osteosarcoma. New England Journal of Medicine, 2021, 385, 2066-2076.	13.9	210
264	APOBEC Mutagenesis Inhibits Breast Cancer Growth through Induction of T cellâ€“Mediated Antitumor Immune Responses. Cancer Immunology Research, 2022, 10, 70-86.	1.6	20
265	Genome Instability in Multiple Myeloma: Facts and Factors. Cancers, 2021, 13, 5949.	1.7	17
268	Intratumor genetic heterogeneity and clonal evolution to decode endometrial cancer progression. Oncogene, 2022, 41, 1835-1850.	2.6	9
269	Mapping clustered mutations in cancer reveals APOBEC3 mutagenesis of ecDNA. Nature, 2022, 602, 510-517.	13.7	60
270	Qualitative and Quantitative Analysis of DNA Cytidine Deaminase Activity. Methods in Molecular Biology, 2022, 2444, 161-169.	0.4	0
272	Prospectively defined patterns of APOBEC3A mutagenesis are prevalent in human cancers. Cell Reports, 2022, 38, 110555.	2.9	25
274	Spectrum of DNA mismatch repair failures viewed through the lens of cancer genomics and implications for therapy. Clinical Science, 2022, 136, 383-404.	1.8	8
275	The Base-Editing Enzyme APOBEC3A Catalyzes Cytosine Deamination in RNA with Low Proficiency and High Selectivity. ACS Chemical Biology, 2022, 17, 629-636.	1.6	10
279	APOBEC3 mutational signatures are associated with extensive and diverse genomic instability across multiple tumour types. BMC Biology, 2022, 20, .	1.7	12
280	Examining clustered somatic mutations with SigProfilerClusters. Bioinformatics, 2022, 38, 3470-3473.	1.8	14
281	APOBEC3: Friend or Foe in Human Papillomavirus Infection and Oncogenesis?. Annual Review of Virology, 2022, 9, 375-395.	3.0	11
282	Migrating bubble synthesis promotes mutagenesis through lesions in its template. Nucleic Acids Research, 2022, 50, 6870-6889.	6.5	5
283	The impact of rare germline variants on human somatic mutation processes. Nature Communications, 2022, 13, .	5.8	13
285	Mechanisms of APOBEC3 mutagenesis in human cancer cells. Nature, 2022, 607, 799-807.	13.7	93
286	APOBEC-Induced Mutagenesis in Cancer. Annual Review of Genetics, 2022, 56, 229-252.	3.2	21

#	Article	IF	Citations
287	Exploring APOBEC3A and APOBEC3B substrate specificity and their role in HPV positive head and neck cancer. IScience, 2022, 25, 105077.	1.9	0
288	Identification of a signature of evolutionarily conserved stress-induced mutagenesis in cancer. Frontiers in Genetics, 0, 13, .	1.1	2
291	Activation induced cytidine deaminase: An old friend with new faces. Frontiers in Immunology, 0, 13, .	2.2	10
292	Addressing the benefits of inhibiting APOBEC3-dependent mutagenesis in cancer. Nature Genetics, 2022, 54, 1599-1608.	9.4	19
293	<scp>APOBEC3G</scp> protects the genome of human cultured cells and mice from radiationâ€induced damage. FEBS Journal, 2023, 290, 1822-1839.	2.2	3
294	Competition for DNA binding between the genome protector replication protein A and the genome modifying APOBEC3 single-stranded DNA deaminases. Nucleic Acids Research, 2022, 50, 12039-12057.	6.5	8
295	Regional mutational signature activities in cancer genomes. PLoS Computational Biology, 2022, 18, e1010733.	1.5	0
296	The Cytidine Deaminase APOBEC3G Contributes to Cancer Mutagenesis and Clonal Evolution in Bladder Cancer. Cancer Research, 2023, 83, 506-520.	0.4	15
297	Structure-Guided Design of a Potent and Specific Inhibitor against the Genomic Mutator APOBEC3A. ACS Chemical Biology, 2022, 17, 3379-3388.	1.6	10
298	Immunogenomic analysis of human brain metastases reveals diverse immune landscapes across genetically distinct tumors. Cell Reports Medicine, 2023, 4, 100900.	3.3	10
299	APOBEC mutagenesis is a common process in normal human small intestine. Nature Genetics, 2023, 55, 246-254.	9.4	9
300	The APOBEC3B cytidine deaminase is an adenovirus restriction factor. PLoS Pathogens, 2023, 19, e1011156.	2.1	0
301	Influence network model uncovers relations between biological processes and mutational signatures. Genome Medicine, 2023, 15, .	3.6	2
302	Understanding Head and Neck Cancer Evolution to Guide Therapeutic Approaches. , 2023, , 63-81.		0
303	APOBEC3-mediated mutagenesis in cancer: causes, clinical significance and therapeutic potential. Journal of Hematology and Oncology, 2023, 16, .	6.9	10
304	In situ Raman spectroscopy and machine learning unveil biomolecular alterations in invasive breast cancer. Journal of Biomedical Optics, 2023, 28, .	1.4	4