

## Publications for VA-C215 (Mut Express MultiS Fast Mutagenesis Kit V2)

Virulence | Aug 19, 2022 | PubMed ID: 35983964 | Read Article

### **New** Cyanidin chloride protects mice from methicillin-resistant *Staphylococcus aureus*-induced pneumonia by targeting Sortase A

Xin Su, Hangqian Yu, ..., Yicheng Zhao

"The fluorescent substrate peptide Abz-LPATG-Dap (Dnp)-NH<sub>2</sub> was synthesized by Lifetein, LLC (Beijing, China).. Using the pET28a-SrtA plasmid as a template, S116A, G167A, and R197A mutations in SrtA were generated according to the instructions of the **Mut Express MultiS Fast Mutagenesis Kit V2** (Vazyme, Nanjing, China).. SrtA-related mutation primer pairs are shown in Supplementary Table 1." ([More...](#))

Nat Commun | Jul 25, 2022 | PubMed ID: 35879296 | Read Article

### Phenylalanine impairs insulin signaling and inhibits glucose uptake through modification of IR $\beta$

Qian Zhou, Wan-Wan Sun, ..., Shi-Min Zhao

"... the pcDNA3.1-Flag/HA vector using CloneExpress MultiS One Step Cloning Kit (#C113-02, Vazyme, Nanjing, China).. The IR mutants were generated by site-directed mutagenesis using the **Mut Express MultiS Fast Mutagenesis kit** (#C215-01, Vazyme) according to the manufacturer's instructions.. Each plasmid was transfected using Lipofectamine 3000 (Invitrogen, Carlsbad, USA) according to the manufacturer's ..." ([More...](#))

bioRxiv | Jul 20, 2022 | Read Article

### The Piks allele of the NLR immune receptor Pik breaks the recognition of AvrPik effectors of the rice blast fungus

Xiao Gui, Wang Wenjuan

"**PrePrint:** .. validated by comparison of their insert sequences with the sequence published at NCBI (HQ662329).. Mutagenesis of Piks -1 was performed using the **Mut Express MultiS Fast Mutagenesis Kit V2** (VAZYME, Nanjing, China).. The two mutant Piks -1229Q /Pikm -1261A and Piks -1261V /Pikm -1229E were confirmed ..." ([More...](#))

Int J Biol Sci | Jul 11, 2022 | PubMed ID: 35864967 | Read Article

### SUMOylation of Nuclear $\gamma$ -Actin by SUMO2 supports DNA Damage Repair against Myocardial Ischemia-Reperfusion Injury

Wei Zhao, Xiuying Zhang, ..., Jianhui Rong

"... with the restriction enzymes EcoR I and BamH I and cloned into the pre-cut pEGFP-N3 vector.. The SUMOylation sites (i.e., K68 and K284 ) in  $\gamma$ -actin were subsequently mutated with **Mut Express II Fast Mutagenesis Kit V2** from **Vazyme Biotech** (Shanghai, China) to yield plasmid construct pEGFP-ACTG (K68 R /K284 R).. Point mutation was performed using oligonucleotide sequences as follows: pEGFP-rACTG-K68R-Forward: 5'-ACCCTGAGGTACCCTATTGAGCACGGCATTGT-3', pEGFP-rACTG-K68R-Reverse: 5'-ATAGGGTACCTCAGGGTCAGAATACCCCTCTTG-3', pEGFP-rACTG-K284R-Forward: ..." ([More...](#))

Front Genet | Jun 20, 2022 | PubMed ID: 35795202 | Read Article

### Tumor Suppressor 4.1N/EPB41L1 is Epigenetic Silenced by Promoter Methylation and MiR-454-3p in NSCLC

Qin Yang, Lin Zhu, ..., Jing Liu

"... cloned in the psiCHECK2 vector (Promega, United States) to construct the wild-type plasmid (psiCHECK2-4.1N-wt).. The corresponding mutant psiCHECK2-4.1N-mut was constructed by in vitro site-directed mutagenesis (Mut Express MultiS Fast Mutagenesis Kit, Vazyme Biotech, China).. Bidirectional sequencing was applied to confirm the correct sequence of the two constructs." ([More...](#))

Open Med Wars | Jun 7, 2022 | PubMed ID: 35795002 | Read Article

### **Let-7i-3p inhibits the cell cycle, proliferation, invasion, and migration of colorectal cancer cells via downregulating CCND1**

Fei Tu, Mengfan Li, ..., Zhiwei Feng

"... Expression Vector (kindly provided by Prof. Qifa Li of Nanjing Agricultural University, Nanjing, China).. For mutation, the let-7i-3p-binding motif in the 3'-UTR of the CCND1 gene was mutated by using the **Mut Express MultiS Fast Mutagenesis Kit V2 (Vazyme Biotech, Nanjing, China)**.. Luciferase activity was measured 24 h after transfection using the Dual-Glo luciferase assay system ..." ([More...](#))

EBioMedicine | Apr 28, 2022 | PubMed ID: 35490460 | Read Article

### **ALKBH5 regulates STAT3 activity to affect the proliferation and tumorigenicity of osteosarcoma via an m6A-YTHDF2-dependent manner**

Zechuan Yang, Zhuo Cai, ..., Xing Bao

"And the half-life of SOCS3 mRNA was analyzed by quantitative RT-PCR as previously described.. SOCS3-MUTs mutants were conducted by **Mut Express II Fast Mutagenesis Kit (Vazyme)**.. Osteosarcoma cells were seeded into the 24-well plate and then were transfected with 250 ..." ([More...](#))

JACC Basic Transl Sci | Apr 25, 2022 | PubMed ID: 35540099 | Read Article

### **Nicotinamide Mononucleotide Alleviates Cardiomyopathy Phenotypes Caused by Short-Chain Noyl-Coa Hydratase 1 Deficiency**

Ke Cai, Feng Wang, ..., Jian-Yuan Zhao

"... using the CloneExpress MultiS One Step Cloning Kit (#C113-02; Vazyme).. Mutant p300 were generated by site-directed mutagenesis using the **Mut Express MultiS Fast Mutagenesis kit (#C215-01, Vazyme)** according to the manufacturer's instructions and transformed to DH5α cells (relief 5α chemically competent cell, TSC-C01; Tsingke) to amplify.. Each plasmid was transfected using Lipofectamine 3000 (Invitrogen) according to ..." ([More...](#))

J Cancer | Apr 24, 2022 | PubMed ID: 35711824 | Read Article

### **ADAR1 Prevents R-loop Accumulation-Driven ATR Pathway Activation in Ovarian Cancer**

Hanwei Cui, Qian Yi, ..., Xiufeng Ye

"... the negative control with non-target. pcDNA3.1(+) (Invitrogen, USA) vector was used for ADAR1 overexpression.. ADAR1 with E912A mutation was generated using **Mut Express MultiS Fast Mutagenesis Kit (Vazyme, China)**.. The lentivirus was generated following the manufacturer's instructions." ([More...](#))

Cell Biosci | Apr 15, 2022 | PubMed ID: 35428322 | Read Article

### **Crystal structure of the Ilheus virus helicase: implications for enzyme function and drug design**

De-Ping Wang, Mei-Yue Wang, ..., Ji-Min Cao

"... and purification of ZIKV helicase180–617 were performed according to the previous study [ ]. Three mutants of ILHV helicase, including R26A, E110A, and Q280A, were constructed by the **Mut Express MultiS Fast Mutagenesis Kit V2 (Vazyme, Nanjing, China)**.. Briefly, the wild-type plasmid was amplified by PCR with different mutagenic primers for the ..." ([More...](#))

Front Med Lausanne | Apr 1, 2022 | PubMed ID: 35433748 | Read Article

### **AI-2 Induces Urease Expression Through Downregulation of Orphan Response Regulator HP1021 in Helicobacter pylori**

Huang Yang, Xiaoxing Huang, ..., Yancheng Wen

"... the HP1021 binding site was analyzed using Peak Scanner version 1.0 software (Applied Biosystems).. The HP1021 binding site on ureA promoter were mutated using **Mut Express MultiS Fast Mutagenesis Kit V2 (Vazyme Biotech)** according to the manufacturer's instructions.. The plasmid pLB-PureA containing the ureA promoter region was used as template while primers ..." ([More...](#))

Front Cell Dev Biol | Apr 1, 2022 | PubMed ID: 35433708 | Read Article

### **Novel Homozygous PADI6 Variants in Infertile Females with Early Embryonic Arrest**

Yao Xu, Rongxiang Wang, ..., Songguo Xue

"... sequence was cloned and inserted into the pRK7 vector with the N-terminal Flag tag.. The mutant plasmids were generated using the **Mut Express MultiS Fast Mutagenesis Kit (Vazyme Biotech Co.,Ltd, China)**.. All the constructs were confirmed by Sanger sequencing." ([More...](#))

Vet Res | Mar 25, 2022 | PubMed ID: 35337383 | Read Article

### **A multifunctional enolase mediates cytoadhesion and interaction with host plasminogen and fibronectin in Mycoplasma hyorhinitis**

Jia Wang, Yanfei Yu, ..., Qiyang Xiong

"... M. hyorhinitis enolase (strain HUB-1, GenBank, CP002170.1, MHR\_0469) was codon-optimized and synthesized (GenScript, China).. Meanwhile, three different site-directed mutants in which C-terminal lysine residues were replaced with leucine were generated using a **Mut Express MultiS Fast Mutagenesis Kit (Vazyme, China)**.. They included two distinct single point mutations (residues 451 or 452) and one double ..." ([More...](#))

Cell Rep | Mar 15, 2022 | PubMed ID: 35294873 | Read Article

### **Methylene-bridge tryptophan fatty acylation regulates PI3K-AKT signaling and glucose uptake**

Song-Hua Hu, Xia-Di He, ..., Shi-Min Zhao

"Plasmid were constructed by PCR-amplifying using Phanta Max Super-Fidelity DNA polymerase (Vazyme, China).. Site-directed mutation of target plasmid was introduced via **Mut Express MultiS Fast mutagenesis Kit V2 (Vazyme, China)**." ([More...](#))

iScience | Mar 11, 2022 | PubMed ID: 35345463 | Read Article

### **Plant AFC2 kinase desensitizes thermomorphogenesis through modulation of alternative splicing**

Jingya Lin, Junjie Shi, ..., Ziqiang Zhu

"... of AFC2 or RSZ21 were cloned and constructed into pGEX-5X-1 or pMAL-c5X vectors, respectively.. Mutated versions of AFC2 (AFC2R284K, AFC2H285K) were generated through a **Mut Express MultiS Fast Mutagenesis Kit V2 (Vazyme)**.. GST or MBP fusion proteins were expressed in E. coli (DE3) cells and further ..." ([More...](#))

Front Genet | Jan 31, 2022 | Read Article

### **C4BPA: A Novel Co-Regulator of Immunity and Fat Metabolism in the Bovine Mammary Epithelial Cells**

Ambreen Iqbal, Pan Ziyi, ..., Zhao Zhihui

"Finally, it was confirmed by sequencing to obtain the C4BPA overexpression vector (pBI-CMV3-C4BPA).. The Shanghai Shenggong Biotechnology Co., Ltd. constructed the plasmid, and the point mutation kits were used for **site-directed mutagenesis** (#C215-01, **Vazyme**, China).. The bMECs were cultured in culture plates (353003, Falcon, Franklin Lakes, NJ) in Dulbecco's ..." ([More...](#))

Front Microbiol | Jan 25, 2022 | PubMed ID: 35145497 | Read Article

### **Chicken-Derived Pattern Recognition Receptor chLGP2 Inhibits the Replication and Proliferation of Infectious Bronchitis Virus**

Kailu Wang, Pengfei Cui, ..., Xin Yang

"To obtain the chLGP2 K30A mutant, we designed amplification primers that can reverse pcDNA3.1-chLGP2-Flag in reverse PCR and introduced a mutation site in the primers (Forward primer: ACGGGCGCCGCGCAAAACCCGCGCGGCTGTGCA, reverse primer: TTTTGCGCCGGCGCCCGTGCCGCGCCCC GTGGGAG) synthesized by Beijing Kinco Xinye Biotechnology Co., Ltd. **Mut Express MultiS Fast Mutagenesis Kit** (**Vazyme Biotech Co.**, Ltd) V2 was used to introduce continuous double base mutations in chLGP2 gene following the kit instructions." ([More...](#))

Int J Mol Sci | Nov 12, 2021 | PubMed ID: 34830122 | Read Article

### **Polycistronic Artificial microRNA-Mediated Resistance to Cucumber Green Mottle Mosaic Virus in Cucumber**

Shuo Miao, Chaoqiong Liang, ..., Laixin Luo

"... cucumber transformation, pEG100-amiR246 was ligated with a GFP gene for screening amiR-CGMMV transgenic lines.. The site mutation of the CGMMV infectious clone vector was used (**Mut Express® MultiS Fast Mutagenesis Kit V2**; **Vazyme**, Nanjing, China).. We mutated the 480th amino acid of Rep from glutamic acid (gaa, E) to ..." ([More...](#))

Cell Transplant | Oct 24, 2021 | PubMed ID: 34693745 | Read Article

### **CircRFWD2 Promotes Osteogenic Differentiation of human Dental Pulp Stem Cells by Targeting miR-6817-5p Through BMP-Smad and p38 MAPK Pathway**

Xinqi Huang, Xuefeng Pan, ..., Zhihe Zhao

"In brief, HEK293 cells were seeded in the 24-well plate with 50% density.. The wild-type 3'UTR sequences of BMPR2 and circRFWD2 mRNA contained putative binding sites for miR-6817-5p, and the mutant 3'UTR of BMPR2 and circRFWD2 were constructed with the **Mut Express MultiS Fast Mutagenesis Kit** (**Vazyme Biotech**, Nanjing, China).. 40 ng BMPR2 luciferase reporter plasmids with 100 nM miR-NC or miR-6817-5p mimic were ..." ([More...](#))

Theranostics | Sep 21, 2021 | PubMed ID: 34646390 | Read Article

### **A novel lincRNA linc-AhRA negatively regulates innate antiviral response in murine microglia upon neurotropic herpesvirus infection**

Yiliang Wang, Weisheng Luo, ..., Zhe Ren

"... Step Cloning Kit (Vazyme, #C115-01), except for TRM27, which was cloned into p3XFLAG-CMV10 plasmids.. The mimic activated IRF3(D) form was amplified using HA-IRF3 plasmids and then cloned into pCMV-HA plasmids with the **Mut Express® MultiS Fast Mutagenesis Kit V2** (**Vazyme**, #C215-01).. All lincRNA-expressing plasmids were constructed by TSINGKE (Beijing, China)." ([More...](#))