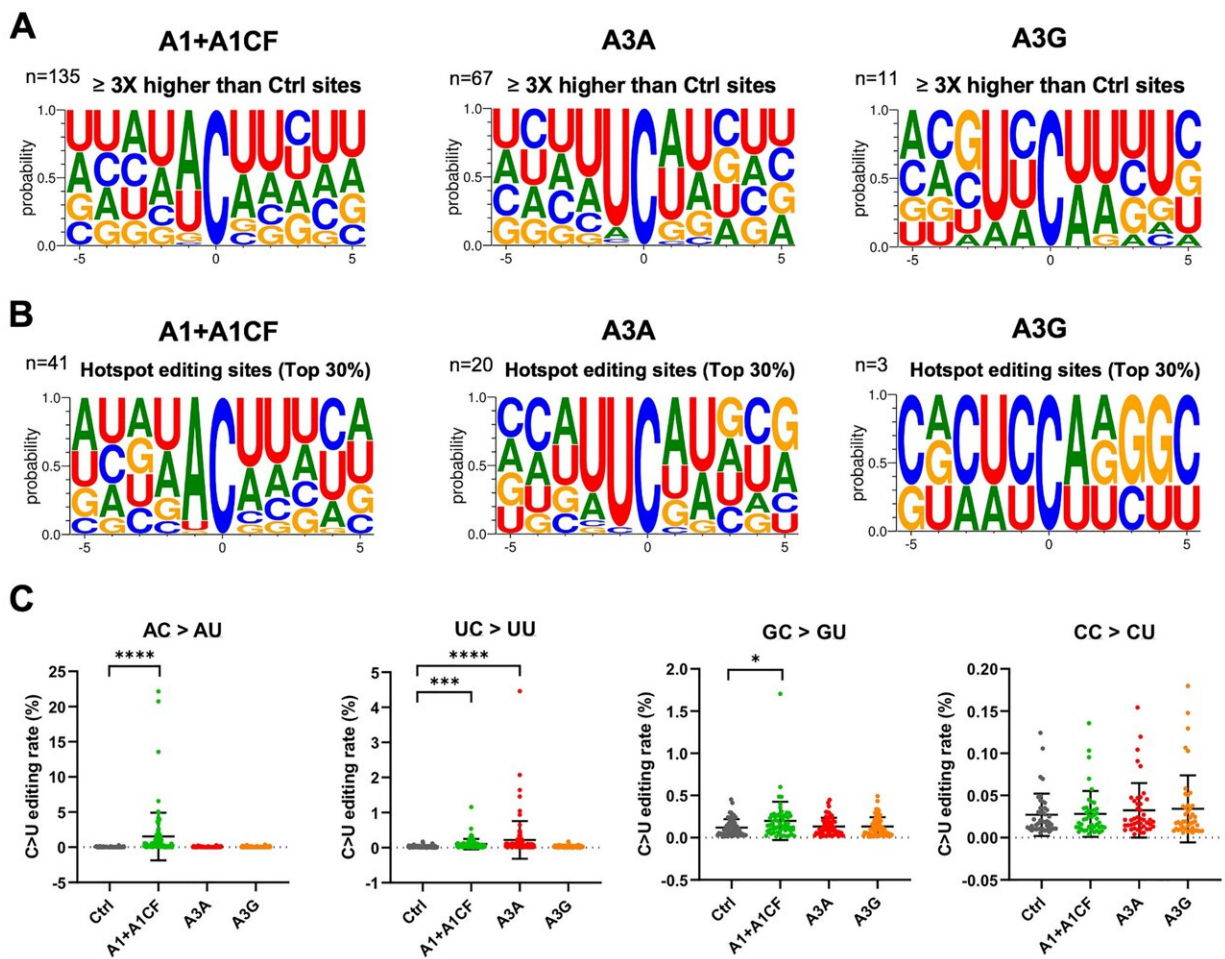


# COVID-19 mutations accelerated by virus-fighting enzyme in human cells, according to new research

September 14 2022, by Darrin S. Joy



Local sequence context at the APOBEC-edited C sites on SARS-CoV-2 RNA. (A) Local sequences around the significantly edited target C sites ( $\pm 5$  nucleotides from target C at position 0) by A1 + A1CF, A3A, or A3G. The editing level of each C site was normalized to the Ctrl, and only sites with  $3 \times$  or

higher editing levels than the normalized value were defined as significant editing sites. (B) Analysis of local sequences around the top 30% edited C sites (or hotspot editing sites), showing predominantly AC motif for A1 + A1CF, UC for A3A, and CC for A3G. (C) Comparison of the C-to-U editing rates (%) of a particular dinucleotide motif by the three APOBECs. Each dot represents the C-to-U editing level obtained from the SSS results. In panel-D, statistical significance was calculated by unpaired two-tailed student's t-test with P-values represented as:  $P > 0.05$  = not significant; not indicated, \*P

Citation: COVID-19 mutations accelerated by virus-fighting enzyme in human cells, according to new research (2022, September 14) retrieved 21 June 2024 from <https://medicalxpress.com/news/2022-09-covid-mutations-virus-fighting-enzyme-human.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.