## Southern Ontario Wastewater Analysis Report

Poon Lab

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## **Analysis of Omicron Mutations**

Add some text here about analysis - @Devin do you have thoughts on what should go in here?

## Prevalence of Omicron Mutations

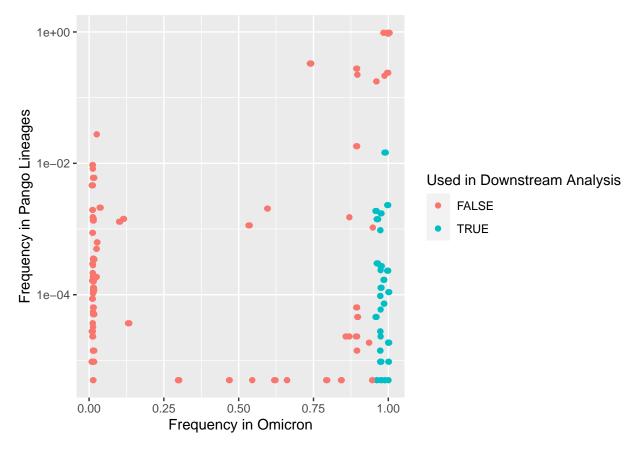


Figure 1 Illustration of 111 mutations found throughout 77 Omnicron genomes. Mutations used in downstream analysis were present in >95% of Omicron genomes and <5% of all other Pango lineages.

From the 111 mutations, we selected mutations present in >95% of Omicron genomes and <5% of all other Pango lineages for further downstream analysis (n=29) on existing data files. These mutations are shown in Table 1.

Table 1 Mutations selected from Omicron mutations for downstream analysis of fastq files.

Mutation	Frequency in Omicron	Frequency in Pango Lineages
~8392A	1.000000	0.0000000
~18162G	1.000000	0.0000045
~2831G	1.000000	0.0000136
$\sim 10448 \mathrm{A}$	1.000000	0.0000136
~13194C	1.000000	0.0001044
$\sim 11536 \mathrm{G}$	1.000000	0.0002270
$\sim 15239 \mathrm{T}$	1.000000	0.0023066
$\sim$ 5385G	0.987013	0.0000000
$\sim$ 23201A	0.987013	0.0000681
$\sim$ 23598G	0.987013	0.0001635
$\sim 23524 \mathrm{T}$	0.987013	0.0145930
$\sim 26576 \mathrm{G}$	0.974026	0.0000000
$\sim$ 22673T	0.974026	0.0000045
$\sim$ 24468A	0.974026	0.0000045
$\sim$ 27258C	0.974026	0.0000091
$\sim$ 22672C	0.974026	0.0000182
$\sim$ 22678C	0.974026	0.0000227
$\sim$ 22897A	0.974026	0.0000545
$\sim$ 26708A	0.974026	0.0000908
$\sim$ 22577A	0.974026	0.0001226
$\sim \! 27806 \mathrm{T}$	0.974026	0.0002316
$\sim$ 22881G	0.974026	0.0002679
$\sim$ 26529G	0.974026	0.0009535
$\sim\!\!24999T$	0.974026	0.0017254
$\sim\!\!24129A$	0.961039	0.0000000
$\sim\!\!23853A$	0.961039	0.0000409
$\sim\!\!23947T$	0.961039	0.0002951
$\sim\!\!26269T$	0.961039	0.0014075
$\sim\!\!22812T$	0.961039	0.0018798