

# Supplementary Materials: Inactivation and Loss of Infectivity of Enterovirus 70 by Solar Irradiation

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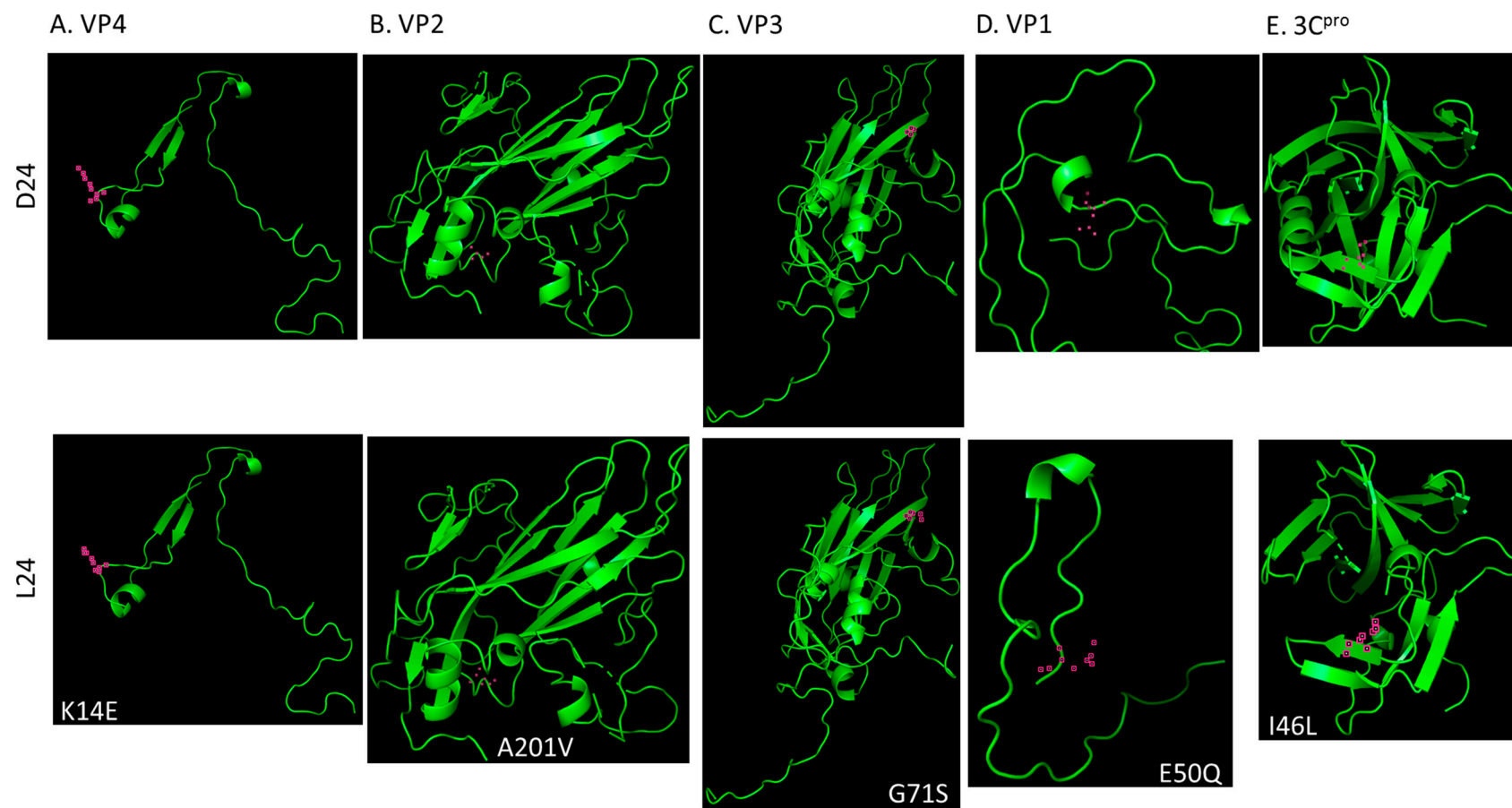
**Table S1.** Physical parameters of the matrices used in this study. TOC: total organic carbon. SUVA: specific ultraviolet absorbance at 254 nm.

|                     | PBS | Effluent | Chlorinated Effluent | Unit     |
|---------------------|-----|----------|----------------------|----------|
| Nitrite             | 0   | 0.7      | 0                    | mg/L     |
| Nitrate             | 0   | 9.4      | 8.1                  | mg/L     |
| TOC                 | -   | 4.18     | 5.2                  | mg/L     |
| SUVA <sub>254</sub> | -   | 1.84     | 0.89                 | L/(mg*m) |

**Table S2.** Sequences and names of primers used in this study.

| Fragment Name            | Primer Name | Sequence of Primer (5'→3') |
|--------------------------|-------------|----------------------------|
| 5' Non Translated Region | neEnt1      | TCCGGCCCCTGAATGCGGCTA      |
|                          | neEnt2      | GAAACACGGACACCCAAAGTA      |
| Fragment 1               | 1F          | TTAAAACAGCTCTGGGGTTG       |
|                          | 1R          | CACAATCCAGTGAGTGGTTTGTCG   |
| Fragment 2               | 2F          | GTAAGTTATGCTTGAGCCTCC      |
|                          | 2R          | GATAGTTATGCAGCCTCAGCT      |
| Fragment 3               | 3F          | CATTGCATTGTACGTGGCAC       |
|                          | 3R          | GGAGTGGGTTCCCTGTGCCACG     |
| Fragment 4               | 4F          | CAGTACCTCCTGCCAATGGAC      |
|                          | 4R          | GGCAGGAGGTAAGTGGCAACAC     |
| Fragment 5               | 5F          | GTTTCTTAATGGGCCTTCCAAC     |
|                          | 5R          | GATCTCAGGGTCTCATTACA       |
| Fragment 6               | 6F          | GTTCAGGTAGTATAGCTGAC       |
|                          | 6R          | TGCATGGTACTGCAGAGTGCCTGGTG |
| Fragment 7               | 7F          | AATGGAATTGTTAGACGCGC       |
|                          | 7R          | GCGCGTCTAACAATTCCATTC      |
| Fragment 8               | 8F          | CCGGGACCGGCTGTTGTC         |
|                          | 8R          | GCCCAACGATATCAATTTGAC      |
| Fragment 9               | 9F          | AGCAACTATCCCTCACC GCC      |
|                          | 9R          | GGCGGTGAGGGAATAGTTGC       |
| Fragment 10              | 10F         | GTCTTATTGTGTATGGGATGCC     |
|                          | 10R         | GGGTGCAATGACTCACCATGGG     |
| Fragment 11              | 11F         | CCCAGTGCCTGGAGATCC         |
|                          | 11R         | GGCACTGGGAAGTCAGTGGC       |
| Fragment 12              | 12F         | CAGCATTGGTGGTCGCAATC       |
|                          | 12R         | GCGACCACCAATGCTGGC         |
| Fragment 13              | 13F         | GTGGGTGCATGACTATCCATC      |
|                          | 13R         | TGACACCTGAGACCCAGCACC      |
| Fragment 14              | 14F         | CCCCTTGCTAGTCCTAGC         |

|             |     |                          |
|-------------|-----|--------------------------|
|             | 14R | GGGGAGTTTACCATGTTGGG     |
| Fragment 15 | 15F | CTTTACCAGTGGTGGTCACC     |
|             | 15R | GGACAATGTGGAGGGGTGGTG    |
| Fragment 16 | 16F | GGGTTCCGGTGCTAATATCAAGGG |
|             | 16R | GAGCCCCTTGATATTAGCACCG   |
| Fragment 17 | 17F | CTGGATCACATCCAACAGCGC    |
|             | 17R | GCGCTGTTGGATGTGATCCAG    |
| Fragment 18 | 18F | CCAGGGTCTATCTCATGTGGG    |
|             | 18R | GRTYCCCAAKTRACCAAATTTAC  |



**Figure S1.** Predicted structure of EV70 (A) VP4, (B) VP2, (C) VP3, (D) VP1, and (E) 3C<sup>pro</sup> of dark control EV70 (D24, upper panel) and solar irradiated EV70 (L24, lower panel). Notations of the amino acid substitutions are indicated in white, in the lower panels. Locations of the amino acid residue are indicated by the purple grid marks. Images were generated by Phyre2 software and visualized on PyMol software.