

Peptide Inhibitors of SARS-CoV-2 Entry

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To date, no effective therapies are available against the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the causative pandemic agent of the coronavirus disease 2019 (COVID-19). Due to their safety, efficacy and specificity, peptide inhibitors hold great promise for the treatment of newly emerging viral pathogens. Based on the known structures of the viral spike protein and cellular targets, several anti-SARS-CoV-2 peptides have been rationally designed and optimized. Here, I will review the current status of peptides inhibiting SARS-CoV-2 entry, in particular by targeting the viral spike protein, the cellular ACE2 receptor or the activating TMPRSS2 protease.

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- [2] Schütz D, Ruiz-Blanco YB, Münch J, Kirchhoff F, Sanchez-Garcia E, Müller JA. Peptide and peptide-based inhibitors of SARS-CoV-2 entry. **Adv Drug Deliv Rev**. 2020 Dec;167:47-65.