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Isolating Compounds that Inhibit EV 71 Virus

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I want to start off by acknowledging what a time in our history to be researching viruses. With the global SARS-COV-2 pandemic that has claimed 2.6 million lives around the world and climbing, I believe it is research like mine that will be useful to hopefully prevent the next pandemic. My research at UConn is about finding a new antiviral drug and/or therapeutic to prevent the onset of Hand, Foot, and Mouth disease in young children caused by Enterovirus 71 (EV 71). For those of you out there that may not be familiar with this disease, it causes painful blisters in the Hands, Feet, and Mouth, along with fever, shortness of breath, and other flu-like symptoms. There is currently no treatment for it, especially because it is a viral illness in nature. My research involves basic transformation of *E. coli* with EV 71 genes, protein purification of the 2C protein, and drug screening through an ATPase assay. The 2C protein is one of the most highly conserved protein domains in the Enterovirus family, and is thus key to target because it aids in viral replication. By using this protein and being able to visualize ATPase activity by measuring the corresponding fluorescence emitted from each reading, the effectiveness of the antiviral can be deduced. Through my research, I have been able to find 2 antiviral compounds that significantly inhibit this activity, and would need to be tested for FDA approval in the future!