

ABSTRACT

SOLUBLE FRAGMENTS OF INFLUENZA VIRUS PB2 PROTEIN CAPABLE OF BINDING RNA-CAP

The present invention relates to soluble fragments of the Influenza virus RNA dependent RNA polymerase subunit PB2 and variants thereof, and crystallized complexes thereof comprising an RNA cap analog. This invention also relates to computational methods using the structural coordinates of said complex to screen for and design compounds that interact with the RNA cap binding pocket. In addition, this invention relates to methods identifying compounds that bind to PB2 polypeptide fragments comprising the RNA cap binding pocket, preferably inhibit the interaction with RNA caps or analogs thereof, by using said PB2 polypeptide fragments, preferably in a high-throughput setting. This invention also relates to compounds and pharmaceutical compositions comprising the identified compounds for the treatment of disease conditions due to viral infections caused by negative-sense single stranded RNA viruses.

FIG. 11