

SMALL MOLECULES THAT INHIBIT EBOLA VIRAL VP35

Amarasinghe, Gaya

Gill, John

T-019326

VP35 is involved in multiple functions crticial to viral replication in filoviruses such as Ebola and Marburg virus. Viruses with VP35 mutations are attenuated in in vivo models. 5.4 million compounds were screened for their ability to bind to VP35 at the key protein-to-protein interface. The screen resulted in 5 small molecules that bind the IFN inhibitory domain of VP35 with high affinity and specificity, and are able to inhibit a replication-competent Ebola virus in a cell-based assay.

Publication: In silico derived small molecules bind the filovirus VP35 protein and inhibit its polymerase cofactor activity