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Binding site prediction within Ebola virus VP40 protein: clue for further drug development

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To the editor,

The emerging African Ebola virus infection in 2014 is the global concern^[1]. To manage this deadly infection, there are still no effective drugs and vaccines. Searching for new drug is the urgent requirement for successful control of the disease. Based on the new finding, it is noted that Ebola virus VP40 protein can be a possible drug target^[2]. Watt *et al.* recently reported that VP40 protein corresponded for packaging of genomes into virus particles and this protein could be a potential antiviral target^[3]. The deep analysis of the structure of this protein can give useful information for further antiviral drug development. Analysis of the binding site within the protein which can be the selected position for drug targeting is the primary necessary assessment. Here, the author uses the standard protein analysis technique, proposed by Yachdav *et al.*^[4], to analyze the VP40 protein (from referencing Zaire Ebola virus). Based on the present study, there are 17 detected binding sites within the VP40 protein (length=326) (Figure 1). Those predicted sites can be further used as targets for antiviral drug development.

Conflict of interest statement

I declare that I have no conflict of interest.

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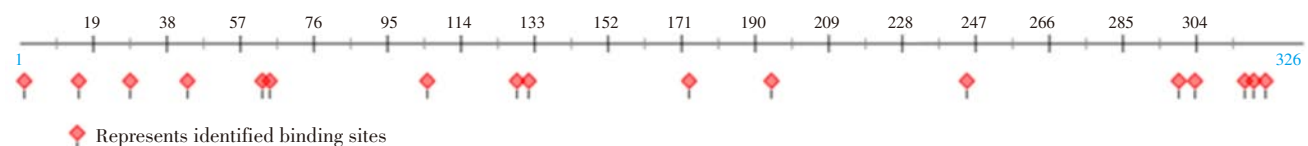


Figure 1. Identified binding sites within Ebola virus VP40 protein.

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