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## Ebola virus infection, human Hsa-miR-1246, hsa-miR-320a and hsa-miR-196b-5p and predicted targets

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To the editor,

Sir, the present problematic Ebola virus (EBOV) infection in Africa is the global concern. The pathogenesis and host response to the EBOV infection is the interesting topic. Sheng *et al.* recently published an interesting article on the observation of “human Hsa-miR-1246, hsa-miR-320a and hsa-miR-196b-5p in human umbilical vein endothelial cells following expression of EBOV glycoprotein[1].” Sheng *et al.* mentioned that inhibiting those miRNA can result in protection against EBOV[1]. Sheng *et al.* also mentioned for observation of some target pathways relating to those miRNAs. Here, the authors use standard bioinformatics technique, Target Scan Human (“searching for the presence of conserved 8mer and 7mer sites that match the seed region of each miRNA[2].”), to assess the predicted targets of those miRNAs. The predicted results are present in Table 1. Of interest, the predicted target here is discordant with the report by Sheng *et al.*[1]. (the adhesion-related molecules tissue factor pathway inhibitor, dystroglycan 1 and the caspase 8 and Fas-associated with death domain protein-like apoptosis regulator). The exact pathways and involved proteins in the inhibition of the three quote miRNAs should be further studied.

**Table 1**

Predicted target of Hsa-miR-1246, hsa-miR-320a and hsa-miR-196b-5p.

miRNA	Predict targets (the three best matched gene targets)
hsa-miR-1246	Family with sequence similarity 53, member C cAMP responsive element binding protein-like 2 Anthrax toxin receptor 2
hsa-miR-320a	Lipid phosphate phosphatase-related protein type 1 KIT ligand delta/notch-like EGF repeat containing
hsa-miR-196b-5p	No predicted target

**Conflict of interest statement**

We declare that we have no conflict of interest.

**References**

- [1] Sheng M, Zhong Y, Chen Y, Du J, Ju X, Zhao C, et al. Hsa-miR-1246, hsa-miR-320a and hsa-miR-196b-5p inhibitors can reduce the cytotoxicity of Ebola virus glycoprotein *in vitro*. *Sci China Life Sci* 2014; doi: 10.1007/s11427-014-4742-y.
- [2] Lewis BP, Burge CB, Bartel DP. Conserved seed pairing, often flanked by adenosines, indicates that thousands of human genes are microRNA targets. *Cell* 2005; **120**(1): 15-20.

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