We would like to thank the reviewers' for their helpful comments. We have tended to these comments and trust our manuscript is now appropriate for publication in your journal.

Comments from the Editors and Reviewers:

Reviewer 1: 1- authors did not clarify the statistical tests used to compare results 2- authors did not clarify the number of experiments they performed to confirm results, was the experiment performed once on one set of system?

1. There is no talk of statistical significance among different constructs binding to ET-1 in the current version of the paper.

What we did was, first, we assessed display levels of individual endothelin traps on phage virions (not absolutely but rather relatively – in comparison to β - construct). This was made possible by the fact that myc-tag follows the displayed construct, so display levels of myc-tag (assessed through ELISA assay using anti-myc-tag antibody) can be calculated with construct display levels.

Next, we subtracted blanks (signals as a result of non-specific binding of constructs to streptavidin beads (i.e. in absence of biotinylated endothelin)) from measured signals. Finally, all the signals were normalized (in addition to display levels of β -construct) to β - construct binding signal.

The data presented are given as arithmetic means plus/minus SD.

2. All the phage ELISA assays were performed in triplicates for each of the clones

Reviewer 2: 1.This study confirmed that the selected ET-traps do not bind the ET-1 paralogs, which confirms the high selectivity of the ET-traps. The ET-traps have not toxic effects at the working concentration. This is an important factor for the potential use of ET-traps as a therapeutic. 2.Please update the references.

The references have been updated.