

Supplementary information:

Phages from Ganges river curtail *in vitro* biofilms and planktonic growth of drug resistant *Klebsiella pneumoniae* in a zebrafish infection model.

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Fig. S1. Capsulated Strain. Capsular staining showed that the MTCC 432 (*K. pneumoniae*) did possess capsule.

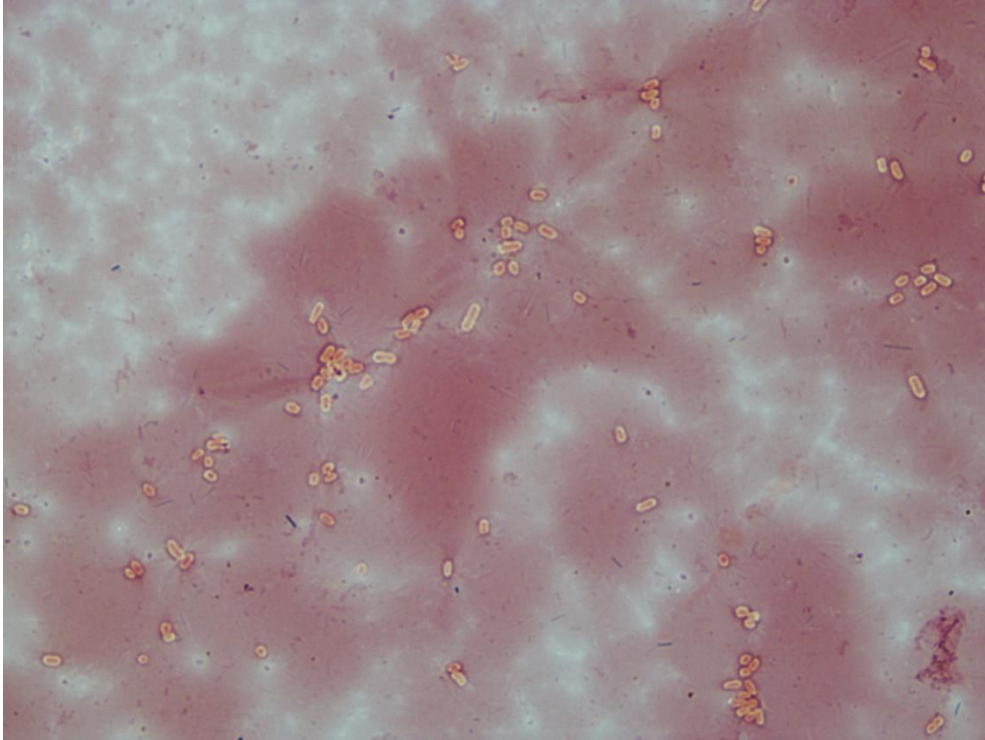


Fig. S2. One step growth curve of KpG phage. KpG has a latent period of 25 min and a larger burst size of 224 PFU/ml.

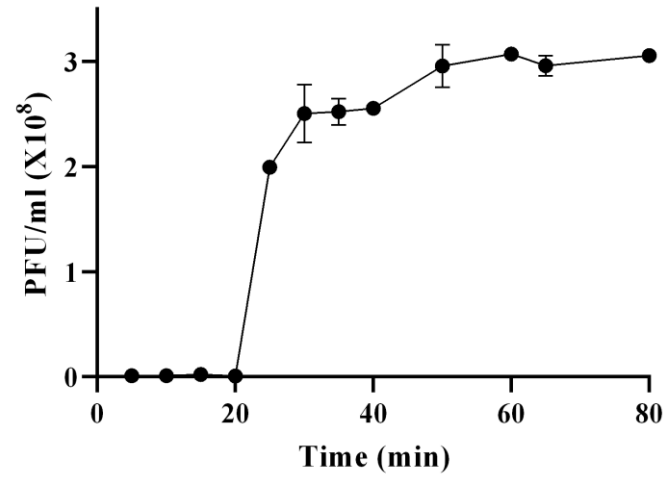


Fig. S3. Gel image showing the PCR products of KpG, confirming it to be *Podoviridae*. L 1 – 100bp ladder; L2 – PCR product of CL1; L3 – PCR product of CL2; L4-L6 – empty lanes.

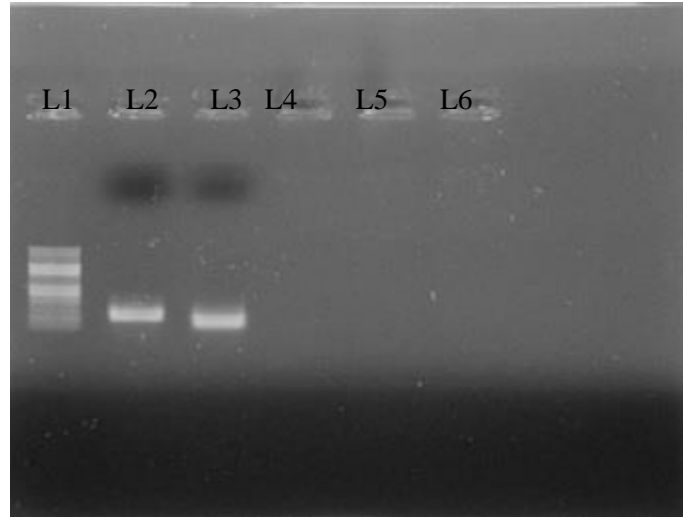
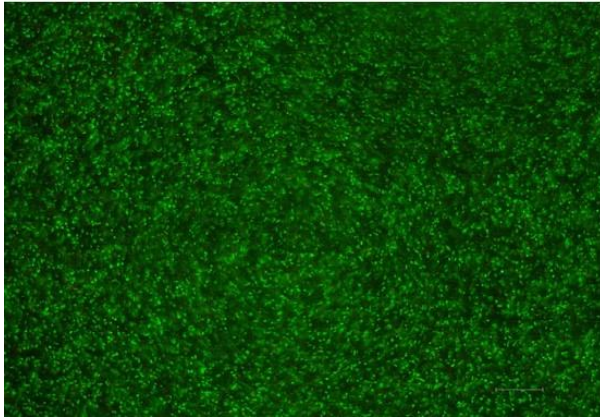


Fig. S4. Live dead staining of biofilms treated with KpG. Biofilms were formed on glass slides and treated with KpG. 24 h post treatment the slides were washed and stained with AO/PI and observed under Nikon fluorescent microscope.

Untreated



KpG Treated

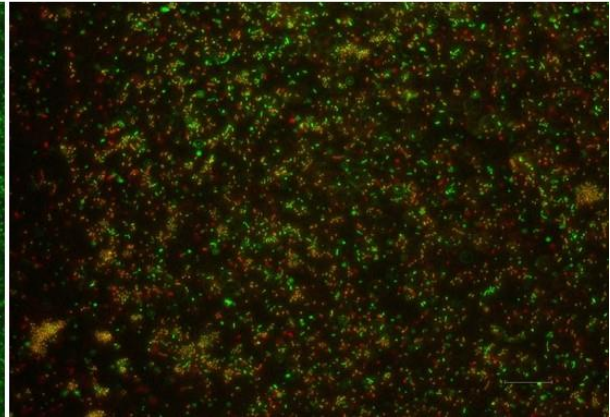


Fig. S5. Brain and liver enzyme profiles show KpG phages do not exhibit significant toxicity in zebrafish. KpG was injected intramuscularly in zebra fish. 48 h post injection, the fish were sacrificed and evaluated for their brain and liver enzyme profiles. Error bar represents the standard error of the mean. The difference in brain enzyme profile is not significant ($P=0.0529$).

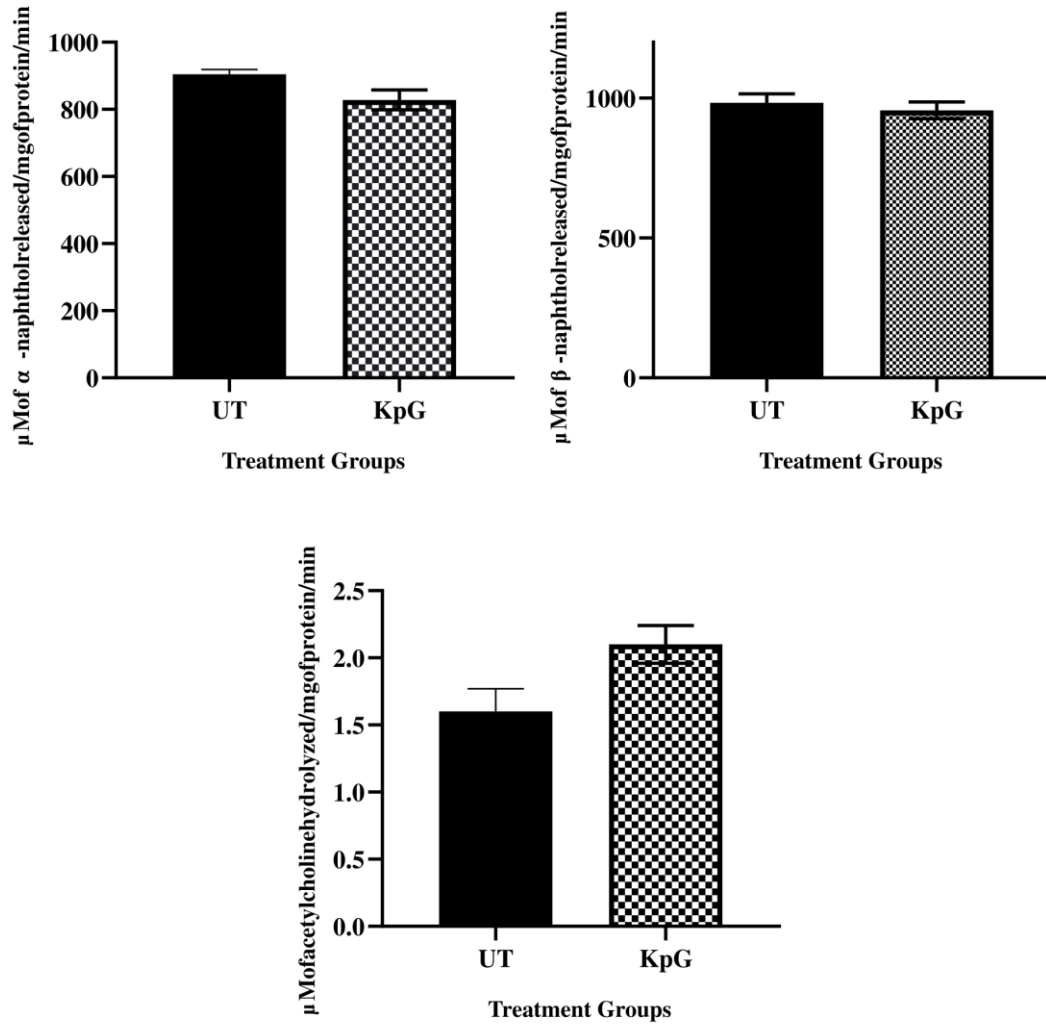


Fig. S6. Histopathological analysis confirms the non-toxic nature of zebrafish when injected intramuscularly. KpG was injected intramuscularly in zebra fish. 48 h post injection, the fish were sacrificed, preserved in formalin and embedded in paraffin wax. Tissue sections were made and stained with hematoxylin and eosin. Analysis of muscle and liver tissues of KpG injected fish did show significant immune response relative to untreated, depicting KpG's non-toxic nature in zebra fish.

