





IMMUNOGENICITY IN MICE OF PLASMID DNA ENCODING HCV CORE AND ALTERNATIVE READING FRAME PROTEINS

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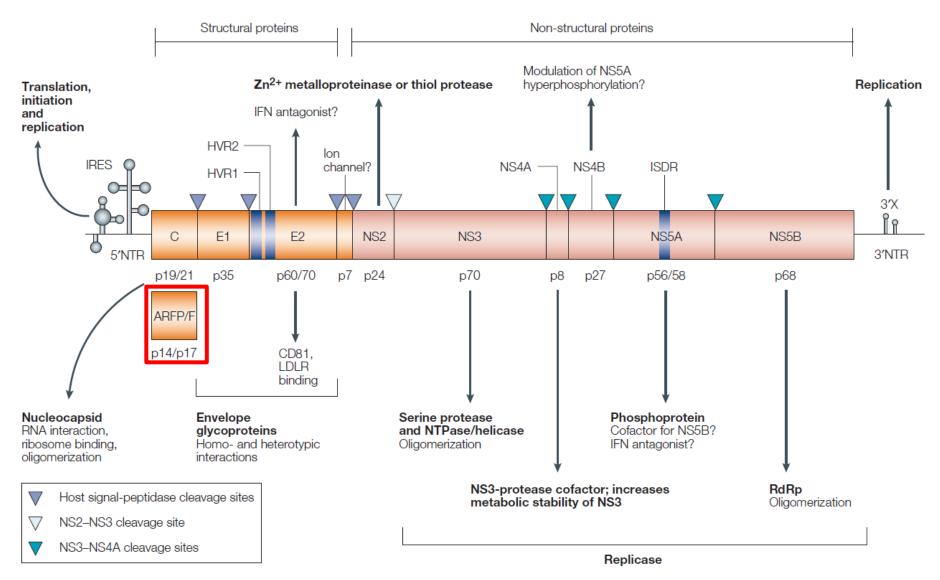
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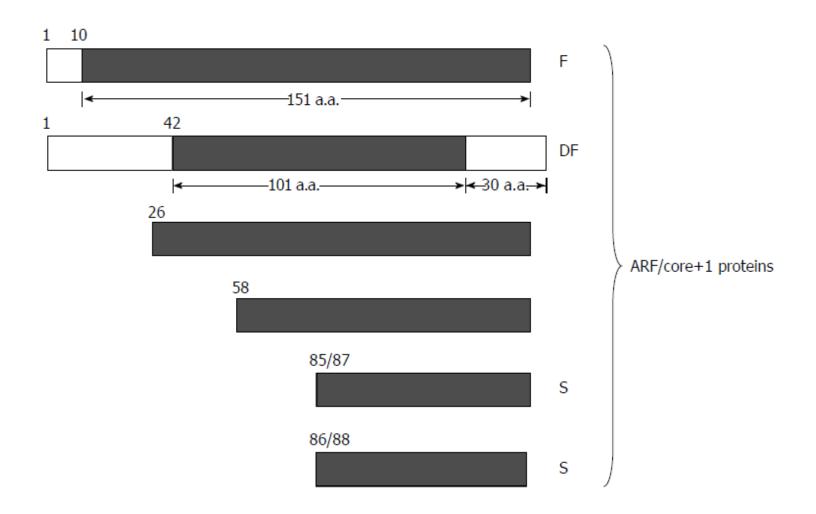
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HCV Alternate Reading Frame Protein (ARFP)

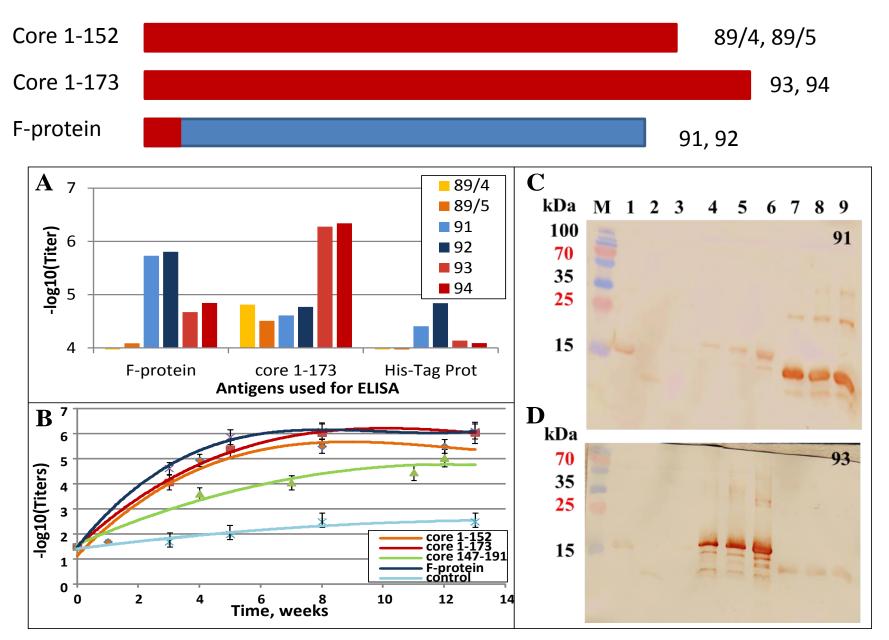


Tan SL at al, 2002 Nat Rev Drug Discov.

Different alternative reading frame proteins



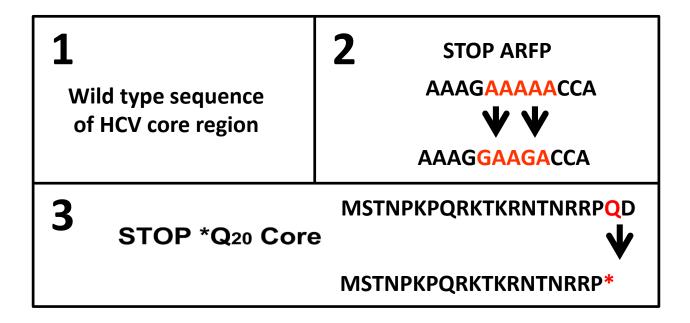
Immunogenicity in rabbits of bacteria expressed core ARFP proteins

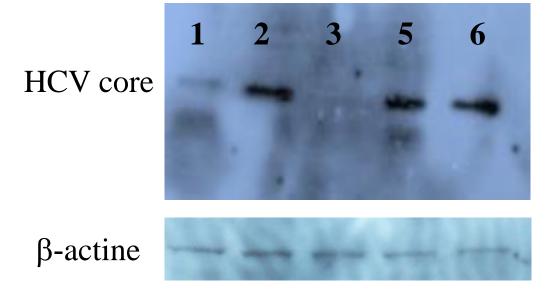


Aims of the study:

To characterize the immunogenicity of plasmids expressing proteins encoded by the 5´terminus of HCV RNA in DNA-immunization, and define the correlates of immunogenicity.

The set of pVAx based eukaryotic expression constructs

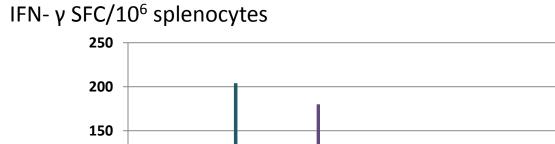


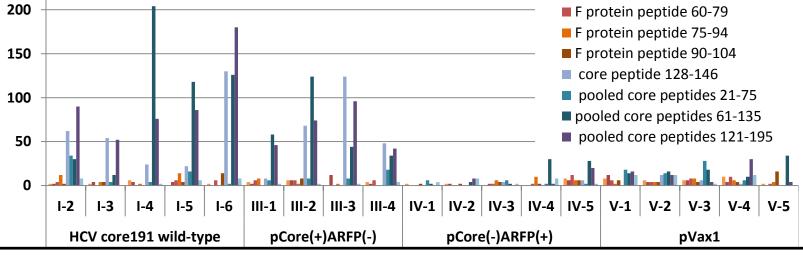


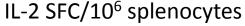
* Lanes 5,6 – synthetic codon optimized HCV core gene

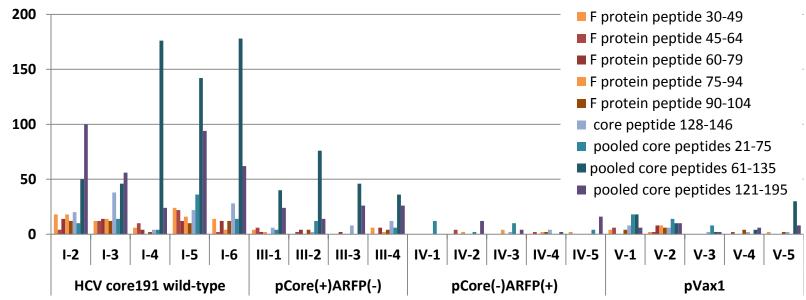
Cellular immune response of BALB/C mice to DNA-immunization

■ F protein peptide 30-49■ F protein peptide 45-64









Conclusions

- 1. Efficacy of ARFP expression by the natural ribosome frameshift mechanism was low and obviously insufficient to induce a specific immune response in DNA-immunization.
- 2. Anti-ARFP immune response is not competing with that against HCV core, and cannot explain low immunogenicity of the latter in DNA-immunization performed with the virus-derived genes.

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