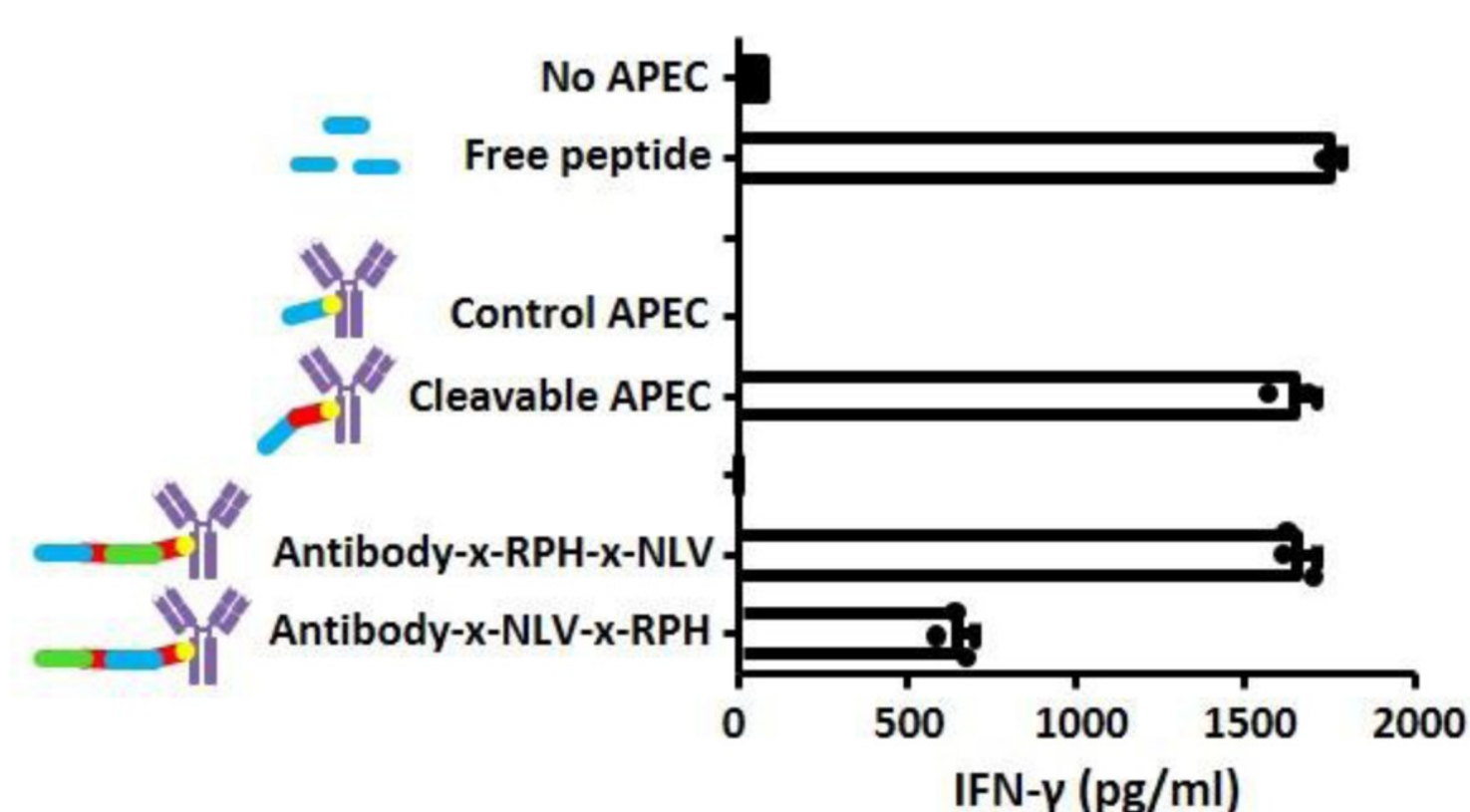


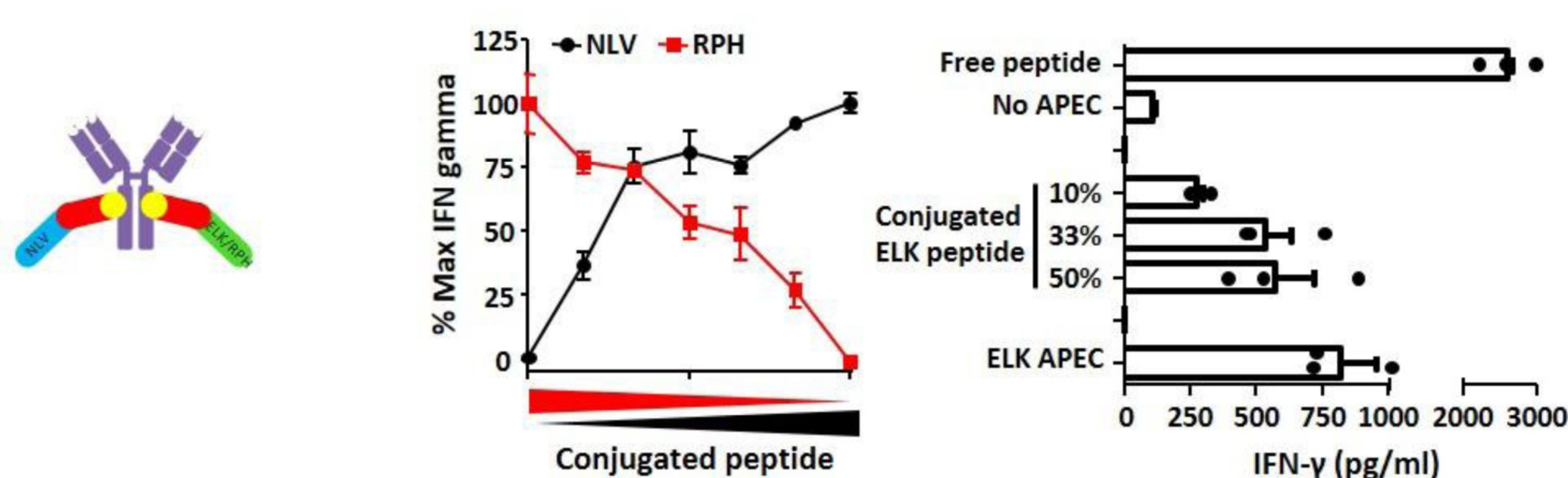
Supplementary Fig. 10: Construction of APECs containing multiple T-cell epitopes (polytopes).

From: [Antibody-mediated delivery of viral epitopes to tumors harnesses CMV-specific T cells for cancer therapy](#)

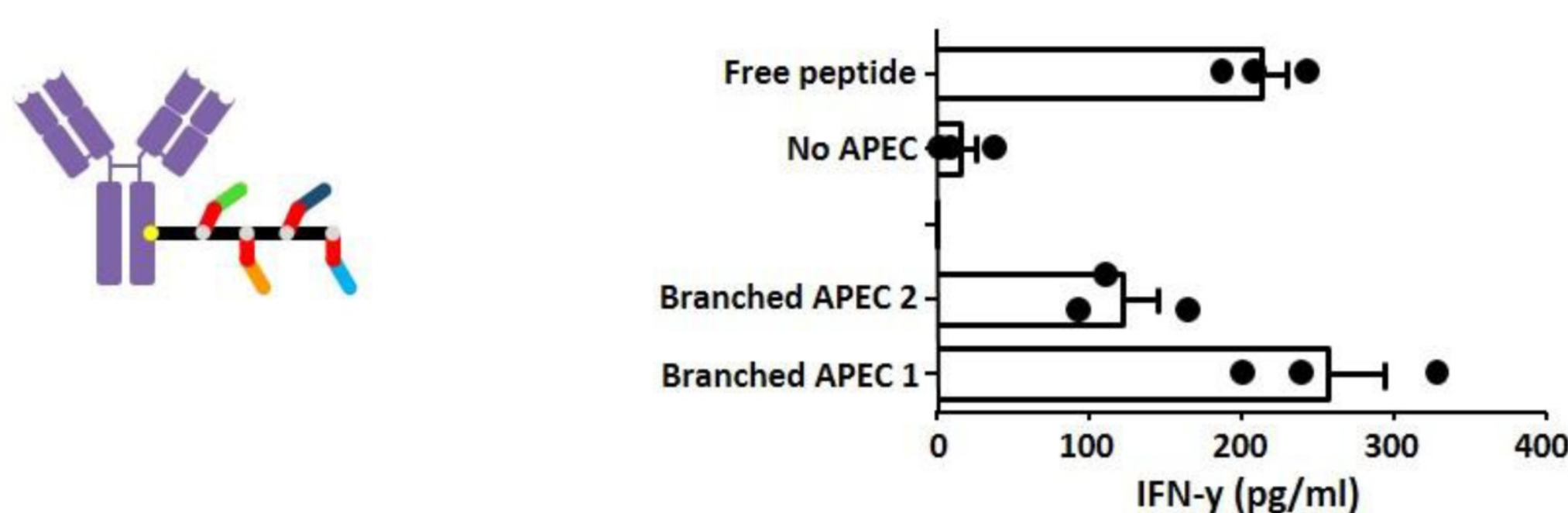
a Concatemer peptide APEC



b Multiple peptide APEC



c Branched APEC



We tested whether it was possible to generate APECs that contained multiple T-cell epitope peptide payloads. (a) The initial concatemer design utilized linear peptides with tandem T-cell epitopes (NLV and RPH) juxtaposed by proteolytic cleavage sequences (-x-). Using T-cells against each epitope, both epitopes elicited T-cell responses (n=3 independent samples). Data represented as mean and error bars represent standard error of the mean. A second method (b) involved the mixed conjugation of peptides to antibodies. In this case the peptide payloads were the same as original APEC design, but two different peptides (with 7-different ratios) were conjugated onto a single APEC. These mixed APECs were able to activate the two different T-cell populations (NLV or RPH) but with varying potency. In a separate experiment three different ratios were tested against two different epitopes (NLV and ELK) which gave concordant results (n=3 independent samples). Data represented as mean and error bars represent standard error of the mean.. Lastly, we created a single APEC species that was conjugated to a branched peptide that contained multiple different cleavable peptides (c). These branched peptides were able to activate T-cell populations (n=3 independent samples). Data represented as mean and error bars represent standard error of the mean.

[Back to article page >](#)