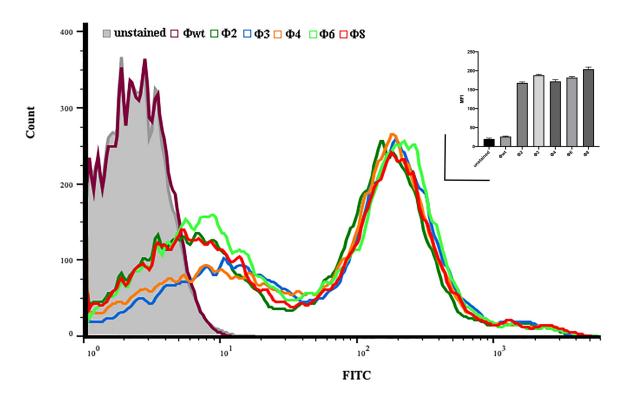


Supplementary Figure 1. Development of an Eµ-mc derived xenograft. (A) Workflow of the xenograft establishment protocol. Cancer cells from the lymph nodes of Eµ-myc tumorbearing were isolated and after four cycles of reinoculation a Eµ-myc-derived cell line was established. (B) Survival rate of the Eµ-myc-derived cell line. (C) Tumor growth of the Eµ-myc-derived cell line.

Phages Clone	A.A. sequence	Frequency
Φ8	CNAGHLSQC	35% (7/20)
Φ2	CNVERDKEC	20% (4/20)
Φ3	CSAYDRPLC	15% (3/20)
Φ4	CTTQMGIVC	15% (3/20)
Φ6	CLQGSGHIC	15% (3/20)

**Supplementary Table 1. Phage ligands isolated from phage-display library.** Recombinant peptide inserts sequences. Percentage of independent clones isolated at the end of the three in vivo biopanning cycles.



Supplementary figure 2. Ex vivo binding validation of the FITC- conjugated phages to Eµ-myc-derived tumor cells by flow cytometry. Selected phages ( $\Phi$ 2,  $\Phi$ 3,  $\Phi$ 4,  $\Phi$ 6,  $\Phi$ 8) and wild type phage ( $\Phi$ wt) were conjugated with fluorescein isothiocyanate (FITC) as fluorophore. Eµ-myc-derived tumor cells were stained with single phages and then analyzed by BD FACSCanto II Flow Cytometer. Cells were gated in FSC-A vs SSC-A. Stringent gating strategies to exclude debris or dead cells that exhibit autofluorescence were applied. Mean fluorescence intensity (MFI) was evaluated using FlowJo software and represented as histogram including ten independent replicates.