## Figure S2

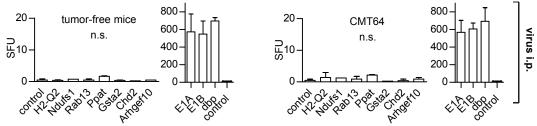
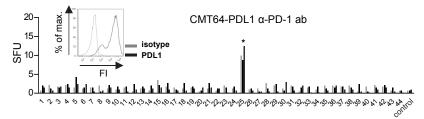


Fig. S2a Characterization of neoepitope-specific CD8 T cell responses.

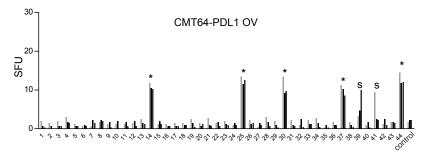
Virotherapy induced T cell responses do not cross-react with viral responses. To analyze cross-reactivity of virus-specific CD8 T-cell responses, tumor-free mice and mice with subcutaneous tumors received intraperitoneal injections of hTertAd to induce virus-specific T-cell responses thereby circumventing oncolysis. Neoepitope-directed responses were investigated by ELISpot. Results show representative data from n=5 mice per group.

gene name	mutation	min wt sequence	score wt (mut)	MHC- type
H2-Q2	D244E	TWQLNGE <u>D</u> L	23 (25)	H2-Db
Ndufs1	V491A	<u>V</u> AVSNMVQKI	28 (29)	H2-Db
Rab13	K196N	SDKK <u>K</u> NKCL	12 (22)	H2-Db
Ppat	I208M	DPYGNRPLC <u>I</u>	20 (20)	H2-Db
Gsta2	Y9H	LH <u>Y</u> FNARGRM	22 (22)	H2-Db
Chd2	T647A	<u>T</u> PLQNSLKEL	26 (27)	H2-Db
Arhgef10	M207I	AWMENPEEAI	26 (28)	H2-Db

Fig. S2b. The SYFPEITHI-score for wildtype peptides used in figure 1d is listed.



**Fig. S2c.** Expression of PD-L1 does not inhibit the neoepitope-specific response upon PD-1 blockade. To investigate the role of PD-L1 on mutanome-specific immune responses in an isogenic experimental setup, CMT64-PDL1 cells were generated by retroviral gene transfer of pQC-PDL1 using standard methods. Mice with CMT64-PDL1 were treated with  $\alpha$ PD-1 antibody as described in Fig. 1B and screened for neoantigen-specific CD8 T-cell responses by IFNγ-ELISpots. The graph shows three representative mice from n=6. All mice treated with PD-1 ab developed a significant response to Ndufs1-V491A.



**Fig. S2d.** Expression of PD-L1 does not inhibit the neoepitope-specific response upon virotherapy. Mice with CMT64-PDL1 tumors received intratumoral treatment with hTert Ad as described in figure 1B. The graph shows representative results of three mice from a group of n=8.