



**Supplementary Figure 7 – In vitro characterization of F8-mIFN $\alpha$ 2 and therapy study with either F8-mIFN $\alpha$ 2, Doxorubicin or the combination in BALB/c mice bearing WEHI-164 sarcoma.** a) cloning scheme. b) expected protein structure, yield of TGE in CHO-S cells and expected molecular weight. c) SDS-PAGE analysis (kDa: marker in kDa, nr: non-reduced, r: reduced). d) Size exclusion profile and standard proteins indicated by black arrows (1: IgG, 145 kDa, 2: BSA, 67 kDa, 3: Diabody, 25 kDa). e) MS profile. f) BIAcore profile using a human EDA coated CM5 sensor chip. g) Activity assay for the respective payload. h) WEHI-164 sarcoma bearing BALB/c mice received either PBS as control (three injections) or 5 mg/kg Doxorubicin (one injection) or 150  $\mu$ g of F8-mIFN $\alpha$ 2 (three injections) or the combination of Doxorubicin and F8-mIFN $\alpha$ 2. n=5 +/- SEM. Statistical significance towards PBS control group is shown on day 14, \*p<0.05, \*\*p<0.005, \*\*\*p<0.0005. i) Body weight change during the treatment phase.