

Enhanced stability of a chimeric hepatitis B core antigen virus-like-particle (HBcAg-VLP) by a C-terminal linker-hexahistidine-peptide

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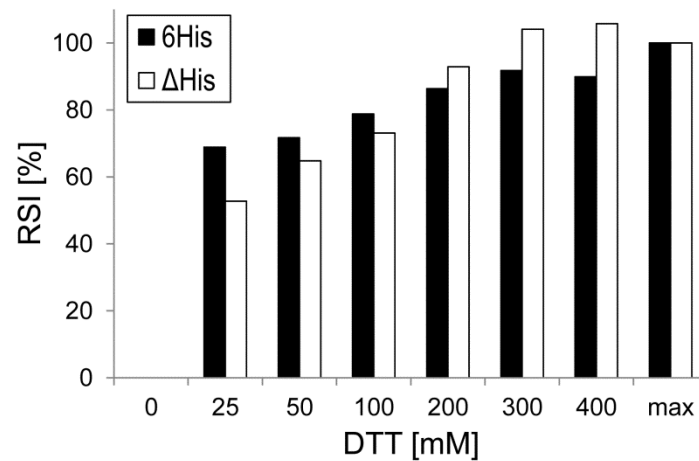
ADDITIONAL FILES FOR PUBLICATION

	6His	Δ His
Host cell DNA [pg/mL]	17	100
Purity [%]	96	93
Endotoxin [EU/mg]	16	236

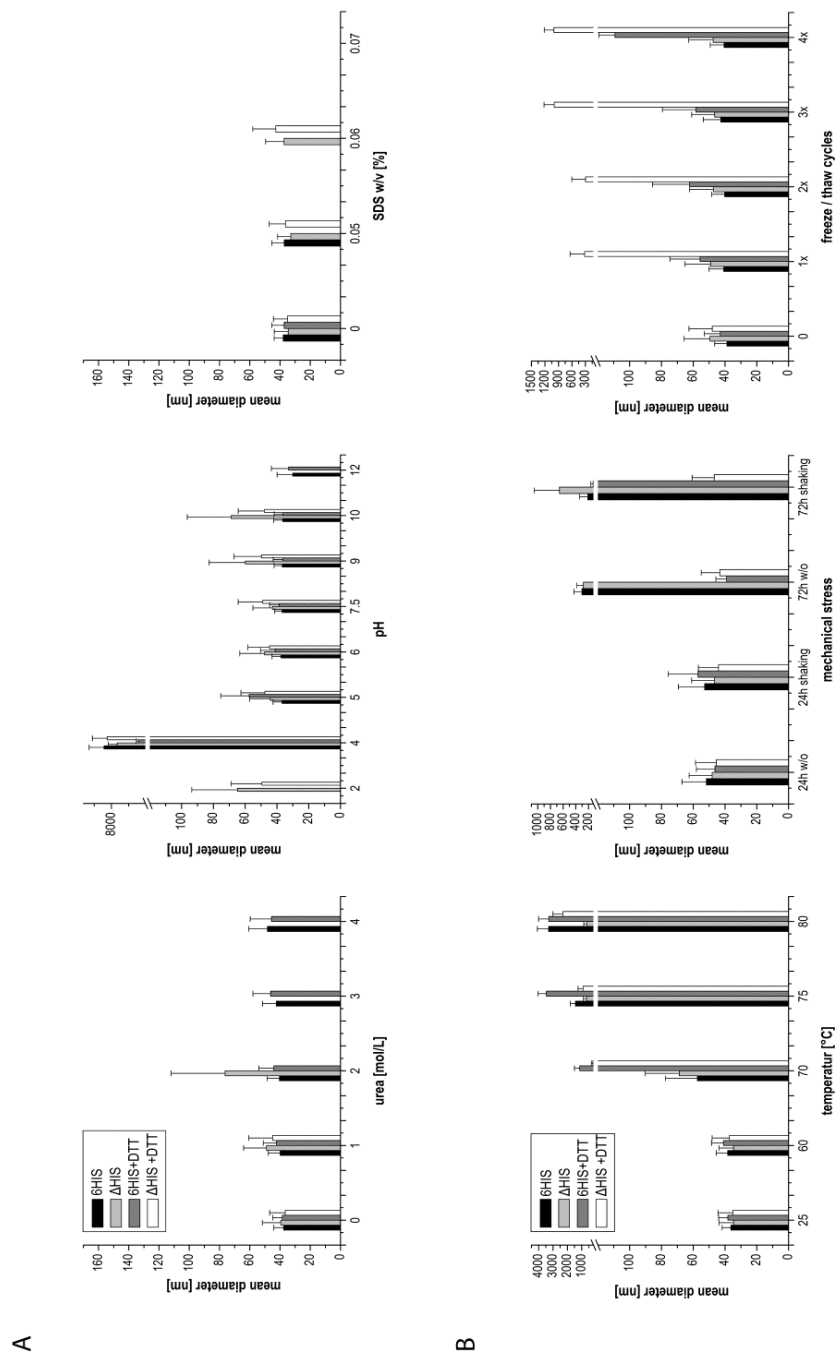
Additional file 1: Table S1. Quality control of chimeric VLPs.

MDIDPYKEFGATVELLSFLPSDFFPSVRDLLDTASALYREALESPEHCSPHHTALRQAILCW
GELMTLATWVGVNLEDGGGSGGGGTQDLYNNPVTGGGSGGGGSR**DLVVSYVNTNMGLK**FR
QLLWFHISCLTFGR**ETVIEYLV**SFGVWIRTPPAYRPPNAPILSTLPETTVVRGGSHHHHHH

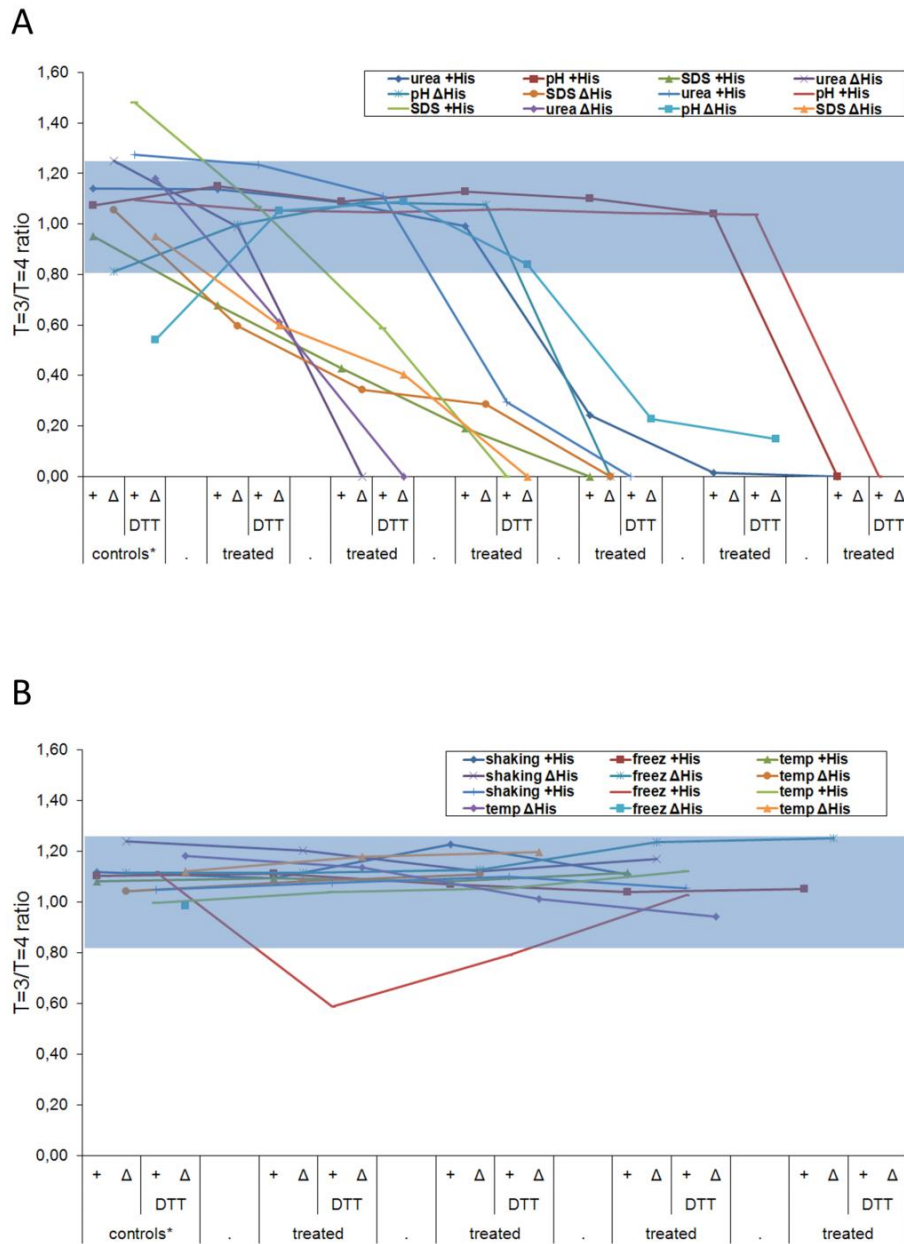
Additional file 1: Table S2. Mass spectrometric analysis (MALDI-TOF-MS) of tryptic fragments derived from PAGE-purified 6His (bold) and Δ His (underlined) VLPs.



Additional file 1: Figure S1. Graphical evaluation of densitometric analysis of the monomeric protein bands. Monomer protein bands intensities of 0 mM DTT were set to zero (background) and max was set to 100% (complete reduction) see Fig. 2B. RSI: relative signal intensity.



Additional file 1: Figure S2. Effects of chemical or physical stress on VLP stability analyzed by dynamic light scattering (DLS). Chimeric 6His-VLPs (6His) and Δ His-VLPs (Δ His) were A) chemically or B) physically stressed in the absence (black and light grey) or presence (+DTT, dark grey and white) of 100mM DTT and subsequently analyzed with DLS. The mean hydrodynamic diameters of all stressed VLP samples are analyzed and only measurements with adequate scattering intensities were plotted into the graphs. Standard deviations are indicated by error bars.



Additional file 1: Figure S3. Graphical representation of $T=3/T=4$ -symmetry-ratios of different stress tests. $T=3/T=3$ -symmetry-ratios of chemically (A) or physically (B) stress test were calculated from normalized densitometric measurements Fig. 3/4. Controls subsume all reference VLP samples marked with * in Fig. 3/4. Treated subsume all the different processed VLP samples. Values with $>50\%$ SD were excluded from the calculations, except adjacent values had $>50\%$ differences. Blue rectangles mark the range of the untreated control $T=4/T=3$ ratios (*) without DTT.