

New bacteriophage-derived lysins, LysJ and LysF, with the potential to control *Bacillus anthracis*

Aleksandra Nakonieczna^{1*}, Małgorzata Łobocka²

¹ Biological Threats Identification and Countermeasure Center, Military Institute of Hygiene and Epidemiology, Puławy, 24-100, Poland

² Institute of Biochemistry and Biophysics of the Polish Academy of Sciences, Warsaw, 02-106, Poland

*corresponding author: aleksandra.nakonieczna@wihe.pl

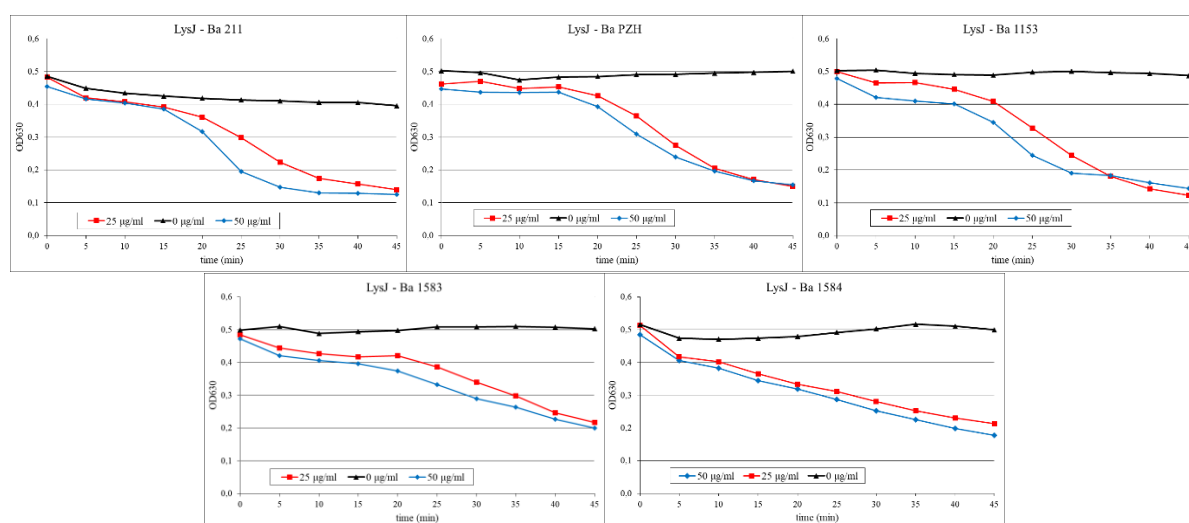


Fig. S1 The effect of the lytic activity of LysJ in the optical density reduction study against virulent *B. anthracis* strains. LysJ at two concentrations, 25 and 50 µg/ml, was added to bacterial cells suspended in 20 mM Tris-HCl, pH 8.0. Bacterial suspensions with PBS instead of the proteins served as a negative control (0 µg/ml)

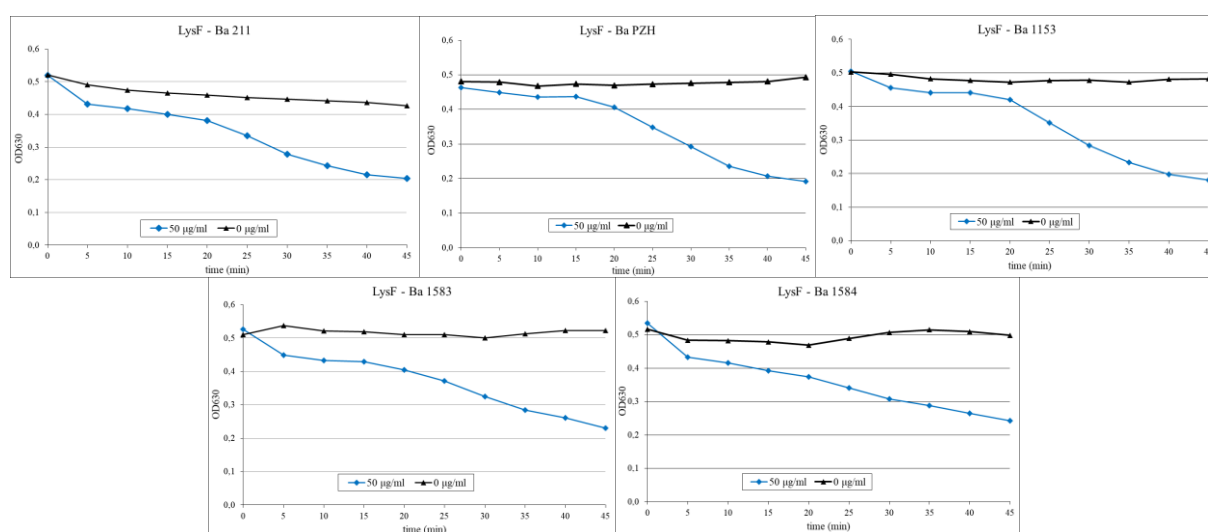


Fig. S2 The effect of the lytic activity of LysF in the optical density reduction study against virulent *B. anthracis* strains. LysJ at a concentration of 50 µg/ml was added to bacterial cells suspended in 20 mM Tris-HCl, pH 8.0. Bacterial suspensions with PBS instead of the proteins served as a negative control (0 µg/ml)

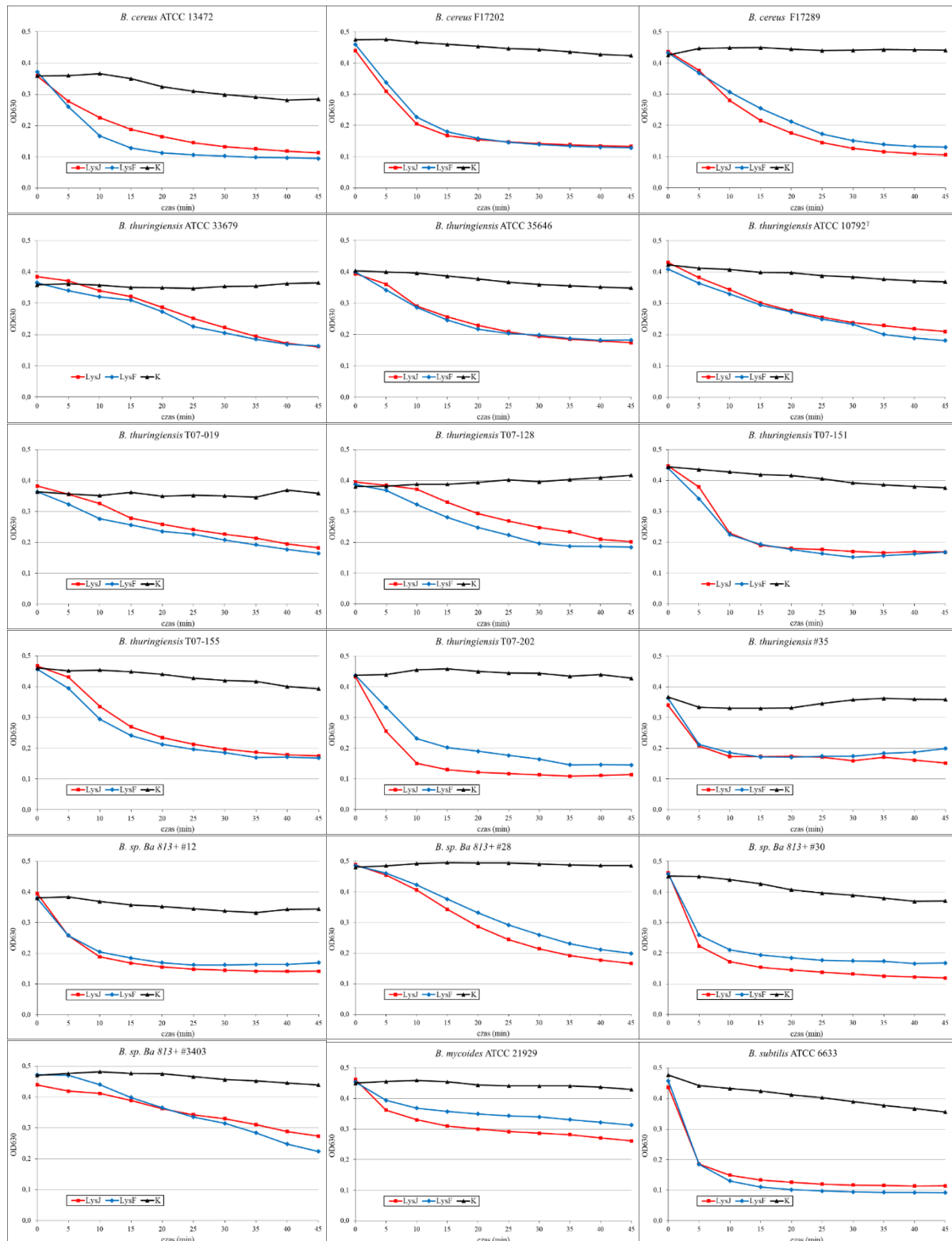


Fig. S3 Selected graphs showing moderate and intense optical density reductions as a result of the lytic activity of LysJ and LysF against various *Bacillus* strains. The lysins were added individually to the bacterial cells suspended in 20 mM Tris-HCl, pH 8.0, to one final concentration of 50 $\mu\text{g/ml}$. Each graph shows the results obtained for both lysins. Bacterial suspensions with PBS instead of the proteins served as a negative control (0 $\mu\text{g/ml}$)