

SUPPLEMENT

Sargsyan A.S., Karapetyan L.T., Mkhitarian A.V., Stepanyan L.A., Sargsyan T.H., Danghyan Yu.M., Sargsyan A.V., Oganezova G.G., Hovhannisyan N.A. (2024) Modeling, synthesis and in vitro testing of peptides based on unusual amino acids as potential antibacterial agents.

Biomeditsinskaya Khimiya, **70**(6), 413-420.

DOI: 10.18097/PBMC20247006413

Table. The antibacterial activity of Fm-795, Fm-795-glycine, Fm-796 and Fm-796-glycine

Strains*	Fm-796 ($\mu\text{g/ml}$)	Fm-796-gly ($\mu\text{g/ml}$)	Fm-795 ($\mu\text{g/ml}$)	Fm-795-gly ($\mu\text{g/ml}$)
<i>P.aeruginosa</i> MDC 5249	27	30	55	60
<i>P.aeruginosa</i> 80 (urine)	27	30	55	60
<i>E.coli</i> ESBL 64 (wound discharge)	55	60	>55	>60
<i>K.pneumonia</i> 63 (sputum)	55	30	55	>60

* Inoculum- 10^4 CFU/ml

Fm-795 = 9-fluorenylmethoxycarbonyl-(S)-b-[4-allyl-3-(pyridine-4'-yl)-5-thioxo-1,2,4-triazol-1yl]-a-alanine

Fm-796= 9-fluorenylmethoxycarbonyl-(S)-b-[4-allyl-3-(pyridine-3'-yl)-5-thioxo-1,2,4-triazol-1yl]-a-alanine

Filter 595nm

The influence of Fm-796, Fm-796-glycine, Fm-796 and Fm-796-glycine on bacterial growth

Conc.*	<i>P.aeruginosa</i> MDC 5249 OD 595	<i>P.aeruginosa</i> 80 OD 595
Fm-796 (2mM) 0.1mM, 55u/ml	0.059/0.057 C=0.694/0.706	0.056/0.057
Fm-796 55 u/ml	0.065/0.054/0.054/0.054 C=0.602/0.465/0.430/0.420	0.062/0.054/0.054/0.057 C=0.465/0.493/0.486/0.563

Fm-796 27 u/ml	0.059/0.060/0.069/0.062 C=0.630/0.721/0.638/0.641	0.063/0.058/0.063/0.059 C=0.586/0.559/0.560/0.639
Fm-796 2.7 u/ml	0.471/0.475/0.454 C=0.645/0.462/0.491/0.476	0.447/0.477/0.493/0.362 C=0.454/0.493/0.506/0.483
Fm-796 10.8 u/ml	0.531/0.482/0.494/0.482 C=0.630/0.721/0.638/0.641	0.332/0.288/0.268/0.318 C=0.586/0.559/0.560/0.639
Fm-796-gly 60 u/ml	0.058/0.059 C=0.694/0.706	0.057/0.060 C=0.565/0.575
Fm-796-gly 60 u/ml	0.058/0.059 C=0.694/0.706	0.056/0.054/0.056/0.054 C=0.465/0.493/0.486/0.563
Fm-796-gly 60 u/ml	0.056/0.054/0.053/0.054 C=0.602/0.465/0.430/0.420	0.056/0.054/0.056/0.054 C=0.465/0.493/0.486/0.563
Fm-796-gly 30 u/ml	0.055/0.055/0.056/0.055 C=0.602/0.465/0.430/0.420	0.436/0.423/0.260/0.491 C=0.454/0.493/0.506/0.483
Fm-796-gly 30 u/ml	0.055/0.055/0.056/0.055 C=0.602/0.465/0.430/0.420	0.058/0.055/0.054/0.052 C=0.465/0.493/0.486/0.563
Fm-796-gly 30 u/ml	0.062/0.059/0.312/0.316 C=0.630/0.721/0.638/0.641	0.060/0.060/0.059/0.061 C=0.586/0.559/0.560/0.639
Fm-796-gly 3 u/ml	0.424/0.409/0.472/0.499 C=746/0.495/0.492/0.476	0.469/0.447/0.477/0.548 C=0.454/0.493/0.506/0.483
Fm-796-gly 12 u/ml	0.371/0.541/0.494/0.480 C=0.630/0.721/0.638/0.641	0.233/0.418/0.324/0.326 C=0.586/0.559/0.560/0.639
Fm-795 55u/ml	0.055/0.057 C=0.686/0.524	0.059/0.056 C=0.553/0.559
Fm-795-gly 55 u/ml	0.057/0.057 C=0.686/0.524	0.056/0.059 C=0.553/0.559
Fm-795 0.05 mM, 27 u/ml	0.157/0.168 C=0.981/0.968	0.285/0.311 C=0.627/0.587
Fm-795-gly 27 u/ml	0.472/0.504 C=0.630/0.721	0.328/0.093 C=0.627/0.587

Conc.*	<i>E.coli</i> ESBL 64 OD 595	<i>K.pneumonia</i> 63 OD 595
Fm-796 55 u/ml	0.061/0.067	0.057/0.058
Fm-796-gly 60 u/ml	0.060/0.062	0.059/0.061
C	0.660/0.498	0.319/ 0.312
Fm-796 27 u/ml	0.060/0.431	0.063/0.062
Fm-796-gly 30 u/ml	0.499/0.460	0.180/0.194
C	0.577/0.509	0.543/0.429
Fm-795 55 u/ml	0.358/0.417	0.056/0.056
Fm-795-gly 60 u/ml	0.491/0.498	0.275/0.391
C	0.487/0.491	0.314/0.330
Fm-795 55 u/ml	0.467/0.391	-
Fm-795 27 u/ml	0.464/0.426	0.247/0.246
C	0.484/0.463	0.314/0.330

Conc.* - final concentration in cultural medium