عنوان مقاله:

Conserved OprF as a Selective Immunogen Against Pseudomonas aeruginosa

محل انتشار:

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خلاصه مقاله:

Background & Objectives: Due to the importance of Pseudomonas aeruginosa in severe inpatient infections and high mortality, the need for an efficient vaccine against these bacteria is increasing. In this regard, the general outer membrane porin of the most problematic microorganism P. aeruginosa, outer membrane protein F (OprF), is a good vaccine candidate. Methods:The databank of NCBI was used to retrieve protein sequences recorded for OprF in P. aeruginosa.The current study aimed at investigating the conservation of the OprF in 150 reference sequences, clinical, and environmental strains of P. aeruginosa from different countries via bioinformatic tools.T-COFFEE and PRALINE software were used for alignment. Results: Of these, 134 strains were isolated from clinical specimens and other strains from environmental samples. Evaluation of alignment by the mentioned software clearly showed that this protein was conserved. Antigenicity and grand average of hydropathicity were favorable. Conclusion: Conservation of OprF in all pathogenic and environmental strains of P. aeruginosa indicated that it can be considered as a good .immunogen; however, the protectivity of OprF should be validated experimentally

کلمات کلیدی:

OpF Protein, Pseudomonas aeruginosa, Vaccine

لینک ثابت مقاله در پایگاه سیویلیکا: