

## PREPARATION OF HUMAN SALIVA PROTEOME POOL – PROTOCOL OF 2D ELECTROPHORESIS FOR MALDI-TOF-TOF MASS SPECTROMETRY

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It is well accepted that saliva is an important body fluid for the maintenance of homeostasis and protection against extrinsic pathogens and reflects oral health status. Moreover, a comparison between samples from healthy and from disease subjects by proteomic technology may reveal unique or increased levels of specific proteins that may be used as biomarkers. The aim of this work was to establish a protocol using 2-D gel electrophoresis for matrix assisted laser desorption/ionization-time of flight (MALDI-TOF)-TOF mass spectrometry (MS) analysis in attempting to determine knowledge on saliva protein composition. To achieve this goal, whole saliva was obtained from a 10 periodontal healthy non-smoking adults (7 female and 3 male; aging 24-48) in the morning at least 1 h after eating. In order to minimize the degradation of the proteins, protease inhibitor cocktail and 1 mM of EDTA were added after sample collection. Protein concentration was determined by using Bio-Rad DC-Protein Assay and stored at -80°C. Salivary proteins were separated using two-dimensional (2-D) gel electrophoresis over a pH range between 3–11(7cm) and 43 spots were signed.