



SELEZIONE PUBBLICA N. 2024S41, PER ESAMI, PER LA STIPULA DI N. 1 CONTRATTO DI LAVORO A TERMINE PER L'AREA FUNZIONARI, SETTORE PROFESSIONALE SCIENTIFICO - TECNOLOGICO, PER N. 12 MESI, AI SENSI DEL D.LGS. 30.03.2001, N. 165 E S.M.I., DEL D.LGS. 15.06.2015, N. 81, IN QUANTO COMPATIBILE, E DEL C.C.N.L. DEL 18.01.2024, PRESSO IL DIPARTIMENTO DI BIOLOGIA – DIBIO. TECNICO DI LABORATORIO PER RICERCHE DI METABOLOMICA/PROTEOMICA TRAMITE SPETTROMETRIA DI MASSA.

QUESITI COLLOQUIO

PROVA N.1

- 1) Principi di funzionamento di un analizzatore a tempo di volo
- 2) Come si usano i filtri in Excel

Testo da tradurre dall'inglese:

More recently, Michaelis-Menten enzyme kinetics were exploited to equalize proteome abundance biases with shotgun proteomics. The methodology cleverly uses a protease, already used in shotgun proteomics pipelines to selectively digest and then deplete abundant peptides with a molecular weight cutoff filter. The remaining partially digested polypeptides are then digested to completion, as routinely performed and described in the following section. With the abundant peptides depleted, dramatic improvements were observed in the total number of protein identifications and the sequence coverage and quantitation metrics of low abundance proteins.

PROVA N.2

- 1) Principi di analisi quantitative mediante LC-MS con strumenti a triplo quadrupolo
- 2) Che estensione hanno i file creati con word

Testo da tradurre dall'inglese:

Proteins are part of a complex network of interacting biomolecules that regulate their function and localization within the cell. Extraction and isolation of proteins from chemical and physical interactions with other biomolecules from specific cellular subcompartments have become a critical step for their global analysis in biological context. In some cases, physical and chemical interactions may otherwise inhibit the isolation or analysis of proteins of interest by LC-MS. The global analysis of membrane-embedded proteins is a prominent example. Isolation, solubilization, and proteolytic digestion of lipid-bound proteins have all proven to be essential steps in their shotgun proteomic analysis.