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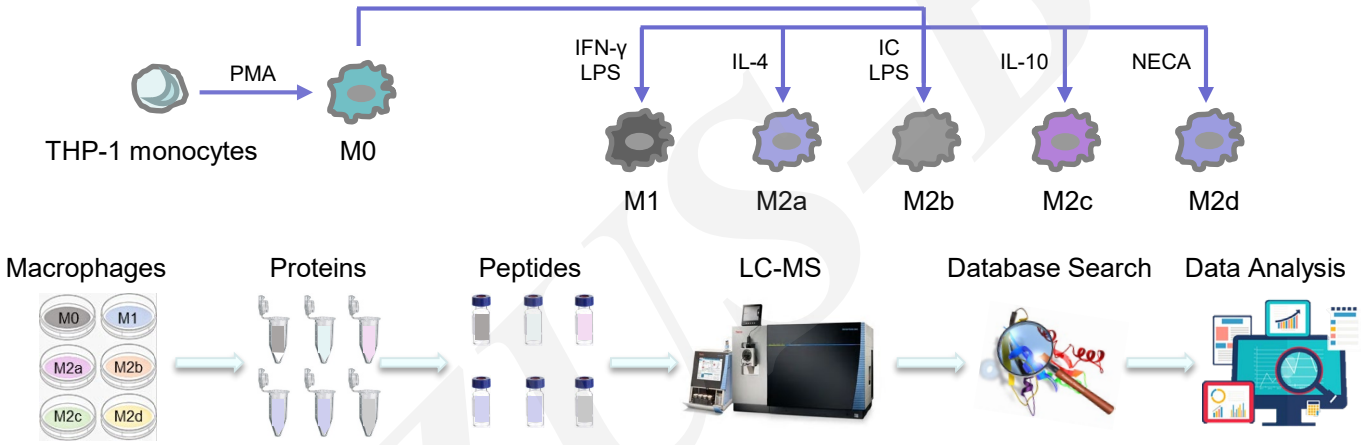
Proteomic characterization of four subtypes of M2 macrophages derived from human THP-1 cells

Key words: Macrophage; THP-1 cells; M2 subtypes; Proteomics; Biological function

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Research Summary

In this study, we systematically analyzed the protein expression profiles of human THP-1-derived macrophages (M0, M1, M2a, M2b, M2c, and M2d) using quantitative proteomics approaches.



- **The commonly and specially regulated proteins of the four M2 subtypes and their potential biological functions were further investigated.**

- **The M2a and M2b, and M2c and M2d have very similar protein expression profiles.**

- **This study confirmed several known markers and generated a list of novel marker candidates which could be used for the identification of M2a, M2b, M2c, and M2d macrophages.**

Figure 1

Innovation points

- **For the first time, the protein expression profiles of four THP-1-derived M2 macrophage subtypes (M2a, M2b, M2c, and M2d) were systematically analyzed by using quantitative proteomics approaches.**
- **This study generated a list of novel marker candidates which could be used for the identification of M2a, M2b, M2c, and M2d macrophages.**
- **Immune-associated diseases were predicted for the four M2 subtypes**



