## **Workflow for DAVID Functional Annotation Analysis** 1. Input Protein List: Open the DAVID Bioinformatics Resources website. Paste the unique protein list obtained from the Venny 2.0 into the Step 1 input column. 2. Select Identifier: In Step 2, choose the Identifier option as "Ensemble Protein ID" from the dropdown menu. 3. Choose List Type: In Step 3, select Gene List as the list type and click on Submit the list to proceed. 4. Convert to Gene Symbols: A pop-up window will appear. In Option 1, specify the species as Homo sapiens and click on Submit to Conversion Tool. The protein identifiers will be converted into gene symbols. 5. Save Converted List: Click on the red arrow next to the Official Gene Symbol column to finalize the conversion. Click Submit Converted List to DAVID as a Gene List. Enter a new name for the list in the pop-up window (e.g., rename it to "Induction"). The renamed list will now appear in the Step 1 column. Select the list (e.g., "Induction") and proceed to Step 2 Functional Annotation Clustering. Click on the Functional Annotation Cluster button to view results. 7. Interpret Results: Use the output to analyze the involvement of genes in various biological processes. For specific analyses, such as disease associations, click on the relevant categories (e.g., "Disease") and interpret the results according to your research objectives.

Figure S1. Workflow for DAVID analysis of unique proteins in the induction group. A schematic representation of the workflow used for DAVID analysis, detailing the identification and functional annotation of unique proteins from the induction group.

## Research Design and Experimental Algorithm

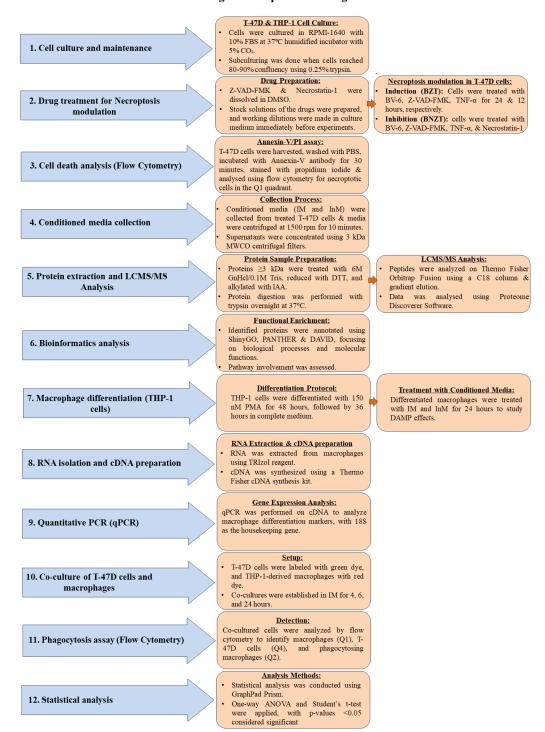


Figure S2. Schematic overview of the study design and experimental workflow. A visual representation of the research design and methodology, outlining the step-by-step workflow of the study. This includes processes for necroptosis induction, macrophage differentiation, and the phagocytosis assay, providing a comprehensive summary of the experimental procedures and their sequence.