

Supplementary Material

Comparative Cytotoxicity and Toxicological Mechanisms of 6:2 Cl-PFAES and PFOS on Pancreatic β Cells: Implications for Glucose Metabolism Disruption

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Number of pages: 4

2 tables:

Table S1. Differential gene expression statistics table

Table S2. The 11 Differentially expressed genes common to 6:2 Cl-PFAES and PFOS

2 figures:

Fig S1. Flow cytometry scatter plot of PFOS and 6:2 Cl PFAES induced apoptosis in β -TC-6 cells

Fig S2. Effects of 1% DMSO on β -TC-6 cell viability

1 Description of Log2 (FoldChange) value

Table S1. Differential gene expression statistics table

DEG Group	Up	Down	Total
PFOS vs Ctrl	76	7	83
6:2 Cl-PFAES vs Ctrl	104	470	574

Table S2. The 11 Differentially expressed genes common to 6:2 Cl-PFAES and PFOS

Gene Symbol	Description
Txnip	Thioredoxin Interacting Protein
Nts	Neurotensin
Cav1	Caveolin 1, Caveolae Protein
Il1rl1	Interleukin 1 Receptor-Like 1
Myof	Myoferlin
Serpinh1	Serine (or cysteine) Peptidase Inhibitor, Clade H, Member 1
S100a6	S100 Calcium-Binding Protein A6 (calcyclin)
Adgr1	Adhesion G Protein-Coupled Receptor A1
9030612E09Rik	RIKEN cDNA 9030612E09 Gene
Tgm2	Transglutaminase 2, C Polypeptide
Ins15	Insulin-Like 5

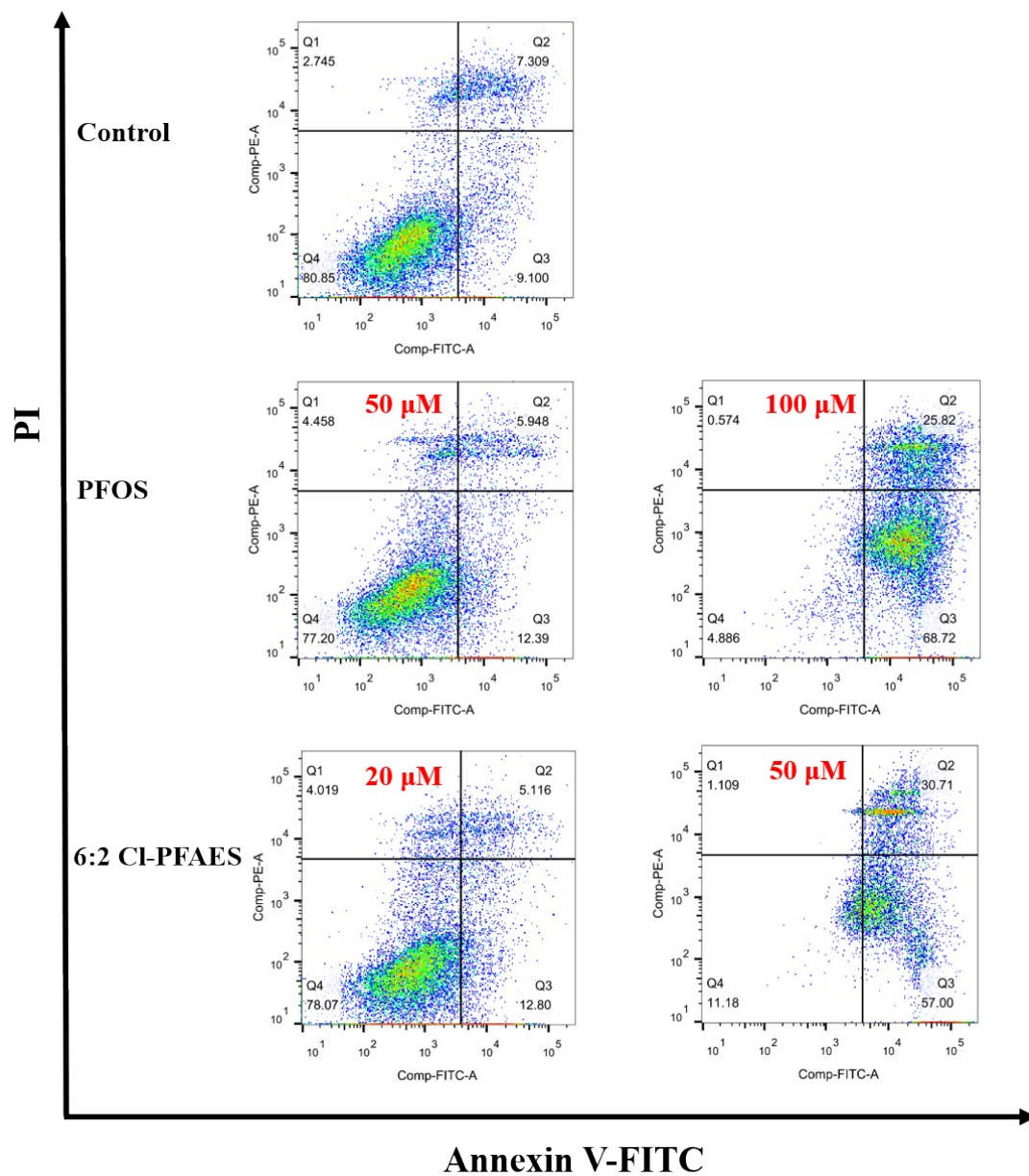


Fig S1. Flow cytometry scatter plot of PFOS and 6:2 Cl PFAES induced apoptosis in β -TC-6 cells.

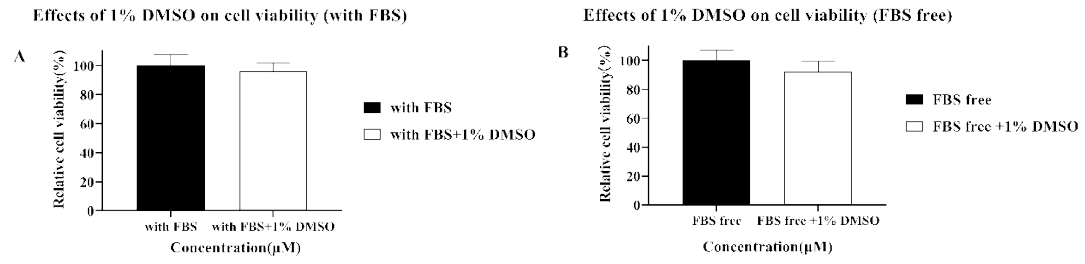


Fig S2. Effects of 1% DMSO on β -TC-6 cell viability. (A) CCK-8 assay results under normal exposure conditions (with 15% FBS); (B) CCK-8 assay results under FBS free exposure conditions.

Description of Log2 (FoldChange) value

Log2 (FoldChange) represents the Log2 value of the fold change between two sample groups. In transcriptomics analysis (such as RNA-Seq), the log2(FoldChange) value is used to measure the degree of change in gene expression levels under different experimental conditions (e.g., control vs. treatment group).

$\text{Log2}(\text{FoldChange}) > 0$ indicates that the gene is upregulated in the experimental group (expression level increases). For example, $\text{log2}(\text{FoldChange}) = 2$ means the gene expression in the experimental group is 4 times that of the control group.

$\text{Log2}(\text{FoldChange}) < 0$ indicates that the gene is downregulated in the experimental group (expression level decreases). For example, $\text{log2}(\text{FoldChange}) = -1$ means the gene expression in the experimental group is 0.5 times (or half) that of the control group.

$\text{Log2}(\text{FoldChange}) = 0$ means there is no significant difference in gene expression between the two groups.