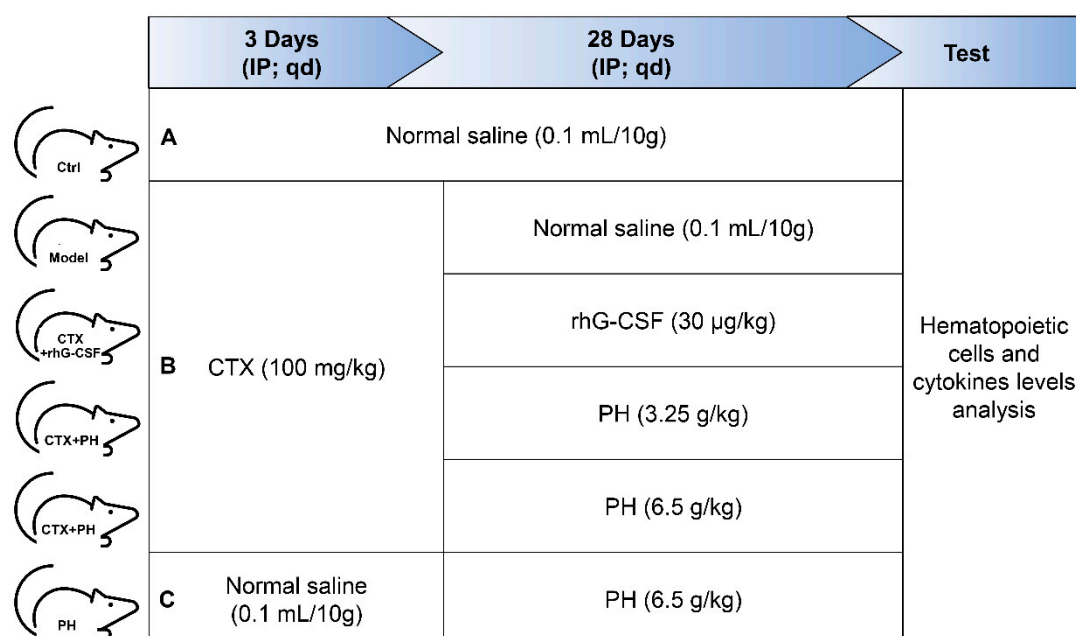


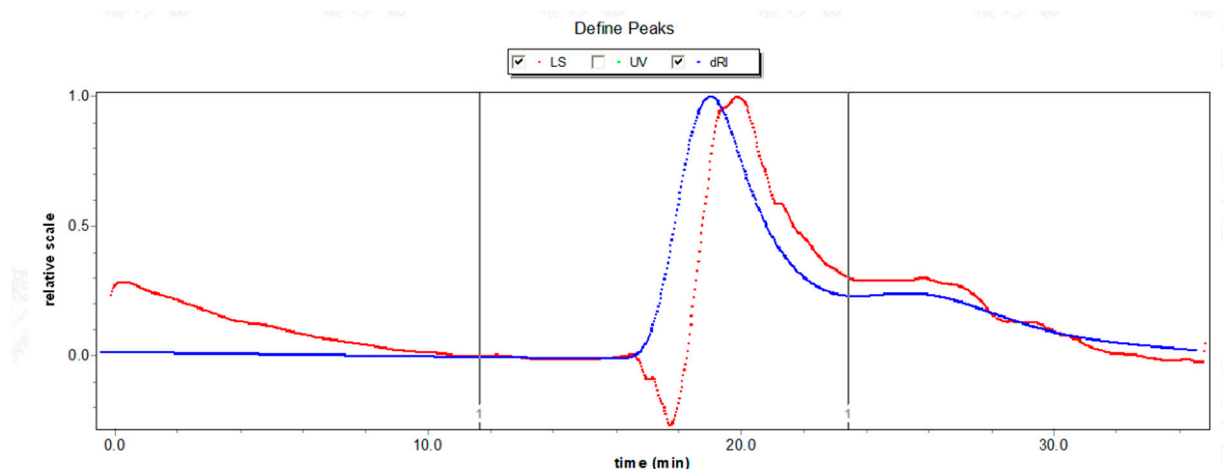
Article

The Involvement of Macrophage Colony Stimulating Factor on Protein Hydrolysate Injection Mediated Hematopoietic Function Improvement

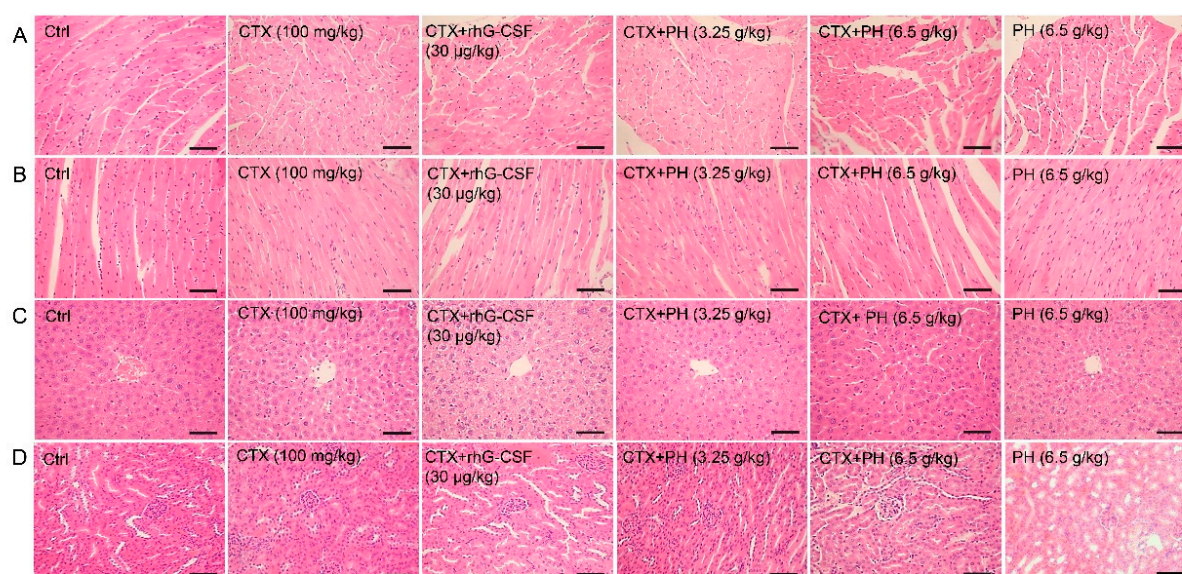
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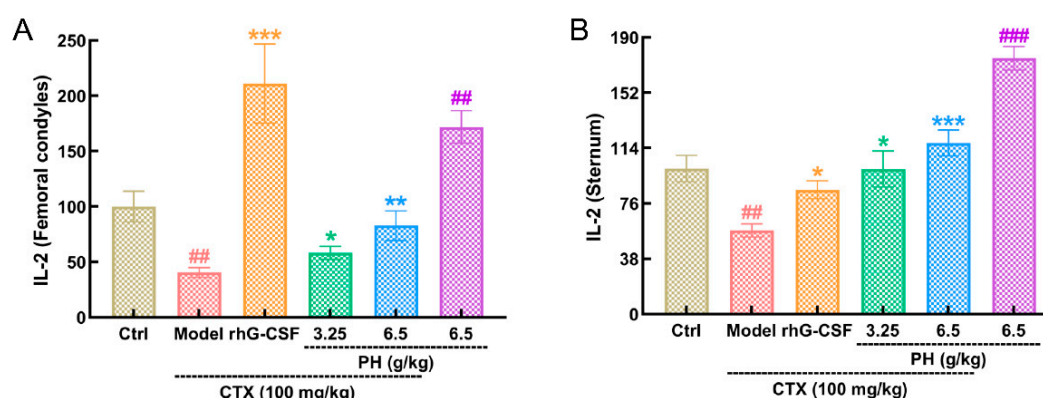
Supplementary Figure S1 The animal experimental schemes flow charts. CTX, cyclophosphamide; Ctrl, control; Model, hematopoietic dysfunction model; NS, normal saline; rhG-CSF, recombinant human granulocyte colony-stimulating factor; PH, protein hydrolysate injection.



Supplementary Figure S2 Define peaks of PH.



Supplementary Figure S3 H&E staining was used to evaluate pathological alterations of (A) heart (cross section), (B) heart (longitudinal section), (C) liver and (D) kidney under a light-microscope digital camera (200 ×; scale bar, 100 μm) (n = 3 mice/group in triplicate). CTX, cyclophosphamide; Ctrl, control; Model, hematopoietic dysfunction model; rhG-CSF, recombinant human granulocyte colony-stimulating factor; PH, Protein hydrolysate injection.



Supplementary Figure S4 Quantitative graph of the expression of IL-2 in the femoral condyle and sternum of mice with hematopoietic dysfunction. Histopathological observations of sternum and femoral condyles of mice with hematopoietic dysfunction. PH enhanced the expression levels of IL-2 in (A) femoral condyle and (B) sternum detected by immunohistochemical staining. Data are showed as the mean ± SD (n = 3 mice/group in triplicate) and determined via a one-way ANOVA test followed by a Tukey's post hoc test comparison. ##*p* < 0.01 and ###*p* < 0.001 vs. control group, **p* < 0.05, ***p* < 0.01 and ****p* < 0.001 vs. model group. CTX, cyclophosphamide; Ctrl, control; Model, hematopoietic dysfunction model; rhG-CSF, recombinant human granulocyte colony-stimulating factor; PH, Protein hydrolysate injection; IL-2, interleukin 2.

Supplementary Table 1 The effects of PH and rhG-CSF on body weight and organ indexes of CTX induced hematopoietic dysfunction mice.

Data are showed as the means \pm S.D. (n=15 mice/group). CTX, cyclophosphamide; Ctrl, control; Model, hematopoietic dysfunction model; rhG-CSF, recombinant human granulocyte colony-stimulating factor; PH, Protein hydrolysate injection. $^{*}p < 0.01$ and $^{***}p < 0.001$ vs. Ctrl group, $^{*}p < 0.05$, $^{**}p < 0.01$ and $^{***}p < 0.001$ vs. Model group. CTX,

		CTX (100 mg/kg)					PH (6.5 g/kg)
		Ctrl	Model	rhG-CSF (30 μ g/kg)	PH (3.25 g/kg)	PH (6.5 g/kg)	
Body weight (g)	1 st day	22.9 \pm 2.1	23.5 \pm 2.1	23.5 \pm 1.0	23.5 \pm 1.4	23.7 \pm 0.9	23.3 \pm 0.9
	4 th day	24.3 \pm 2.4	22.2 \pm 1.5 ^{##}	23 \pm 1.3	22.3 \pm 1.4	22.5 \pm 1.1	24.6 \pm 0.9
	11 th day	25.7 \pm 1.7	22.7 \pm 1.6 ^{###}	21.5 \pm 2.0	23.3 \pm 1.6	23.4 \pm 1.2	26.2 \pm 1.0
	18 th day	26.0 \pm 2.3	23.4 \pm 1.6 ^{##}	24.5 \pm 1.0	24.4 \pm 1.4	24.5 \pm 1.2	27.4 \pm 1.0
	25 th day	26.8 \pm 2.7	21.6 \pm 1.7 ^{###}	23.7 \pm 1.4 ^{**}	22.7 \pm 1.3	23.3 \pm 1.6 [*]	27.9 \pm 1.2
	32 nd day	27.4 \pm 1.9	20.7 \pm 2.7 ^{###}	23.1 \pm 1.4 ^{**}	23.6 \pm 1.5 ^{**}	23.0 \pm 1.4 ^{**}	28.5 \pm 1.4
Organ index (%)	Liver index	48.9 \pm 3.2	49.7 \pm 3.0	52.0 \pm 3.5	51.7 \pm 2.9	51.9 \pm 3.9	48.6 \pm 3.8
	Kidney index	14.5 \pm 0.9	13.6 \pm 1.2	13.5 \pm 0.7	12.0 \pm 1.6	13.9 \pm 1.6	14.0 \pm 0.8
	Spleen index	3.5 \pm 0.4	13.4 \pm 0.8 ^{###}	12.2 \pm 1.2	9.8 \pm 1.5 ^{***}	10.1 \pm 1.0 ^{***}	3.3 \pm 0.2
	Thymus index	1.6 \pm 0.2	0.5 \pm 0.3 ^{###}	1.0 \pm 0.5 ^{**}	0.8 \pm 0.4 [*]	0.6 \pm 0.3	1.4 \pm 0.2

cyclophosphamide; Ctrl, control; Model, hematopoietic dysfunction model; rhG-CSF, recombinant human granulocyte colony-stimulating factor; PH, Protein hydrolysate injection.