Ononin Ameliorates Inflammation and Cartilage Degradation in Rat Chondrocytes with IL-1β-induced Osteoarthritis by downregulating the MAPK and NF-×B Pathways

Fang Xu¹², Liang-Jun Zhao³, Ting Liao⁴, Zhao-Cong Li²⁵, Lei-Lei Wang²⁵, Pan-Yu Lin¹, Rui Jiang¹, Qing-Jun Wei^{1*}

* Correspondence: weiqingjungxnn@163.com

¹Department of Orthopaedics Trauma and Hand Surgery, The First Affiliated Hospital of Guangxi Medical University, Nanning,

530021, China.

²Guangxi Colleges and Universities Key Laboratory of Prevention and Control of Highly Prevalent Diseases, Guangxi Medical

University, Nanning, 530021, China.

³Department of Bone and Joint Surgery, The First Affiliated Hospital of Guangxi Medical University, Nanning, 530021, China.

⁴Department of Endocrinology, Liuzhou Municipal Liutie Central Hospital, Liuzhou, 545007, China.

⁵Department of Toxicology, School of Public Health, Guangxi Medical University, Nanning, 530021, Guangxi, China.

Fang Xu and Liang-Jun Zhao contributed equally to this work.

Full list of author information is available at the end of the article.

Supplementary Information

the full length original blot Collegan II:



Figure 1 a. the original blot of collegan II.

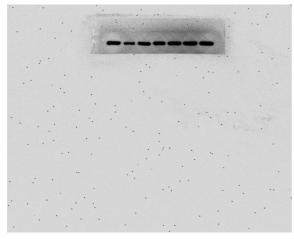


Figure 1 b. the original blot of collegan II (another exposure image).

MMP-13:

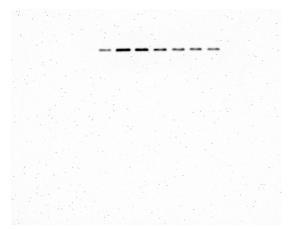


Figure 2 a. the original blot of MMP-13.

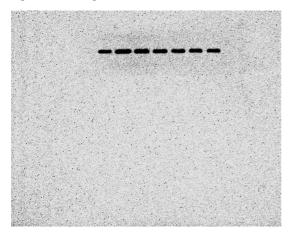


Figure 2 b. the original blot of MMP-13 (another exposure image).

GAPDH (for collegan II and MMP-13 proteins):

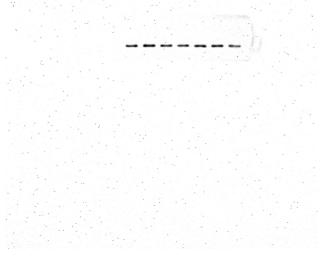


Figure 3 a. the original blot of GAPDH (for collegan II and MMP-13 proteins).

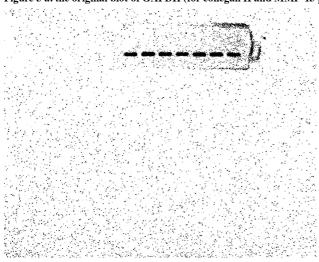


Figure 3 b. the original blot of GAPDH (for collegan II and MMP-13 proteins) (another exposure image).

p-ERK:

Figure 4 a. the original blot of p-ERK.

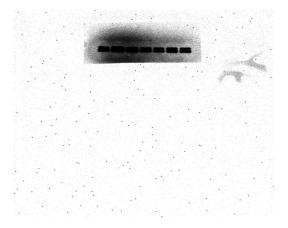


Figure 4 b. the original blot of p-ERK (another exposure image).

t-ERK:



Figure 5 a. the original blot of t-ERK.

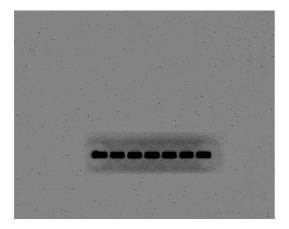


Figure 5 b. the original blot of t-ERK (another exposure image).

p-JNK:

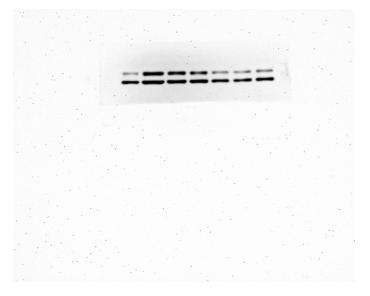


Figure 6. the original blot of p-JNK.

t-JNK:

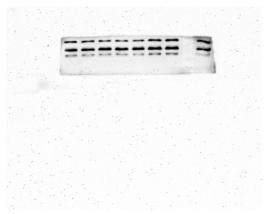


Figure 7. the original blot of t-JNK.

p-P38 (bottommost blot):



Figure 8. the original blot of p-P38 (bottommost of the blot).



Figure 9 a. the original blot of t-P38.

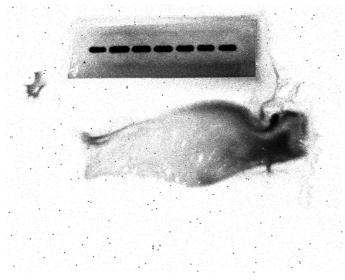


Figure 9 b. the original blot of t-P38 (another exposure image).

t-P38:

ρ-ΙκΒα:

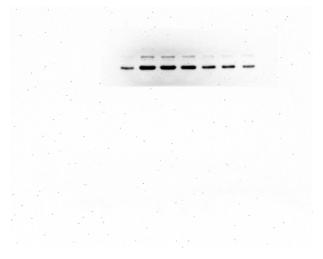


Figure 10. the original blot of p-I×Bα.



Figure 11 a. the original blot of t-IxB α .

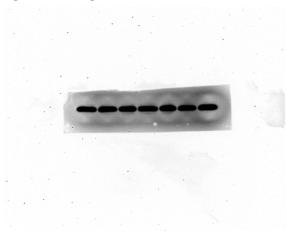


Figure 11 b. the original blot of t-IzB α (another exposure image).

p-P65 (upmost blot):

E tablecom and	A CONTRACTOR OF A CONTRACTOR OFTA CONTRACTOR O			
Contraction of the local division of the loc			 1000	
Ba -				
R.R. Contraction	_			
and the second second	the second states			
-		States and		
and the second se	And a state of the second s		 -	

Figure 12. the original blot of p-P65 (upmost blot).

t-P65:





Figure 13 b. the original blot of t-P65 (another exposure image).

GAPDH (for p-ERK/t-ERK, p-JNK/t-JNK, p-P38/t-P38, p-IzBa/t-IzBa and p-P65/t-P65 proteins):

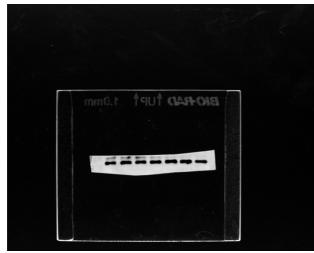


Figure 14. the original blot of GAPDH (for p-ERK/t-ERK, p-JNK/t-JNK, p-P38/t-P38, p-I×Bα/t-I×Bα and p-P65/t-P65 proteins).