

Antagonistic Effect of Jiawei Shengjiang San on a Rat Model of Diabetic Nephropathy: Related to EGFR/MAPK3/1 Signaling Pathway

Jingyu Mao¹, Qin Lu², Fei Gao³, Hao Liu⁴, Jinchuan Tan⁵

¹Graduate School, Hebei University of Chinese Medicine ²School of Basic Medical Sciences, Hebei University of Chinese Medicine ³Department of Endocrinology and Nephrology, Renal Research Institute of Beijing University of Chinese Medicine, Dongzhimen Hospital Affiliated to Beijing University of Chinese Medicine ⁴Hebei Province Academy of Chinese Medicine Sciences ⁵Department of Nephrology, First Affiliated Hospital, Hebei University of Chinese Medicine

* These authors contributed equally

Corresponding Authors

Hao Liu
1095755878@qq.com

Jinchuan Tan
liuhaomj@163.com

Citation

Mao, J., Lu, Q., Gao, F., Liu, H., Tan, J. Antagonistic Effect of Jiawei Shengjiang San on a Rat Model of Diabetic Nephropathy: Related to EGFR/MAPK3/1 Signaling Pathway. *J. Vis. Exp.* (207), e66179, doi:10.3791/66179 (2024).

Date Published

May 10, 2024

DOI

10.3791/66179

URL

jove.com/video/66179

Materials

Name	Company	Catalog Number	Comments
2×SYBR Green qPCR Master Mix	Servicebio, Wuhan, China	G3320-05	
24-h urine protein quantification (UTP)	Nanjing Jiancheng Institute of Biological Engineering	N/A	
3,3'-Diaminobenzidine	Shanghai Huzheng Biotech, China	91-95-2	
Automatic biochemical analysis instrument	Hitachi, Japan	7170A	
Anhydrous Ethanol	Biosharp, Tianjin, China	N/A	
BAX Primary antibodies	Affinity, USA	AF0120	Rat
BCL-2 Primary antibodies	Affinity, USA	AF6139	Rat
BX53 microscope	Olympus, Japan	BX53	
Chloroform Substitute	ECOTOP, Guangzhou, China	ES-8522	
Desmond software	New York, NY, USA	Release 2019-1	
Digital Constant Temperature Water Bath	Changzhou Jintan Liangyou Instrument, China	DK-8D	
EGFR Primary antibodies	Affinity, USA	AF6043	Rat
Embed-812 RESIN	Shell Chemical, USA	14900	
Fasting blood glucose (FBG)	Nanjing Jiancheng Institute of Biological Engineering	N/A	
FC-type full-wavelength enzyme label analyser	Multiskan; Thermo, USA	N/A	
GAPDH Primary antibodies	Affinity, USA	AF7021	Rat
Glycated serum protein (GSP)	Nanjing Jiancheng Institute of Biological Engineering	N/A	
Transmission electron microscope	Hitachi, Japan	H-7650	

Haematoxylin/eosin (HE) staining solution	Servicebio, USA	G1003	
Image-Pro Plus	MEDIA CYBERNETICS, USA	N/A	
Real-Time PCR Amplification Instrument	Applied Biosystems, USA	iQ5	
Irbesartan tablets	Hangzhou Sanofi Pharmaceuticals	N/A	
Isopropanol	Biosharp, Tianjin, China	N/A	
JWSJS granules	Guangdong Yifang Pharmaceutical	N/A	
Kodak Image Station 2000 MM imaging system	Kodak, USA	IS2000	
Low-density cholesterol (LDL-C)	Nanjing Jiancheng Institute of Biological Engineering	N/A	
MAPK3/1 Primary antibodies	Affinity, USA	AF0155	Rat
Medical Centrifuge	Hunan Xiangyi Laboratory Instrument Development, China	TGL-16K	
Mini trans-blot transfer system	Bio-Rad, USA	N/A	
Mini-PROTEAN electrophoresis system	Bio-Rad, USA	N/A	
NanoVue Plus Spectrophotometer	Healthcare Bio-Sciences AB, Sweden	111765	
p-EGFR Primary antibodies	Affinity, USA	AF3044	Rat
Periodic acid-Schiff (PAS) staining solution	Servicebio, USA	G1008	
p-MAPK3/1 Primary antibodies	Affinity, USA	AF1015	Rat
Secondary antibodies	Santa Cruz, USA	sc-2357	Rabbit
Streptozotocin	Sigma, USA	S0130	
SureScript First-Strand cDNA Synthesis Kit	GeneCopeia, USA	QP056T	
TriQuick Reagent	Solarbio, Beijing, China	R1100	
Ultra-Clean Workbench	Suzhou Purification Equipment, China	SW-CJ-1F	