

Materials List for

# Enhancing the Development and Growth of Infant Cerebral Palsy Rats Using Selective Spinal Manipulations

Tianlei Gao<sup>\*1</sup>, Yuanwang Wang<sup>\*1</sup>, Min Li<sup>1</sup>, Liuying Yang<sup>1</sup>, Suyu Chen<sup>1</sup>, Lin Gao<sup>1</sup>, Yinghua Shi<sup>1</sup>, XingHe Zhang<sup>1</sup>, XianTao Tai<sup>1</sup>

<sup>1</sup>Yunnan University of Traditional Chinese Medicine

<sup>\*</sup>These authors contributed equally

## Corresponding Authors

XingHe Zhang

doczhangxh@163.com

XianTao Tai

taixiantao@163.com

## Citation

Gao, T., Wang, Y., Li, M., Yang, L., Chen, S., Gao, L., Shi, Y., Zhang, X., Tai, X. Enhancing the Development and Growth of Infant Cerebral Palsy Rats Using Selective Spinal Manipulations. *J. Vis. Exp.* (2024), e65659, doi:10.3791/65659 (2024).

## Date Published

February 2, 2024

## DOI

10.3791/65659

## URL

jove.com/video/65659

## Materials

Name	Company	Catalog Number	Comments
96-well plates	Beijing Lanjieke Biotechnology Co., LTD	11510	Determination of protein concentration
Anti-beta Actin antibody	Abacm	Ab8227	Dilution: 1/2000
Anti-Growth Hormone antibody	Abacm	Ab126882	0.5 µg (0.5 ng/lane)
Anti-Growth Hormone receptor antibody	Abacm	Ab202964	Dilution: 1/1000
Basic operating microscope	Shanghai YuYAN Scientific Instrument Co. LTD	SM-101	The common carotid artery was isolated under microscope during modeling
BCA developer	Biyuntian Biological Engineering Co., LTD	P0010	Determination of protein concentration
Chemiluminescence imaging system	Shanghai Qinxiang Scientific Instrument Co., LTD	100240073	Protein banding imaging
Direct-load Color Prestained Marker	Beijing Kangrunchengye Biotechnology Co., LTD (GenStar)	M221	Western Blot
DK-30Automatic snow ice maker	Henan Brothers instrument equipment Co., LTD	SHDX0023	Ice-making
ECL luminescent substrate kit	Beijing Lanjieke Biotechnology Co., LTD	BL520B	Convert latent images in exposed film into visible images
Electric-heated thermostatic water bath	TAISITE INSTRUMENT	DK-98-II	The young rats were resuscitated after modeling
Electronic scales	Kunshan YoukeWEI ELECTRONIC Technology Co. LTD	CN-LQC10002	The body weight of the young rats was measured
German small white electric coagulation pen hemostat	Haohang	L55×W125×H37	It was used to coagulate the left common carotid artery
Glove	Jiangsu YANGzi LiDE Medical Device Co. LTD	Q/320684 YZYL001-2017	For massage operation
Glycine	Beijing Soleibao Technology Co., Ltd.	Cat#G8200	Electrophoretic solution, Configure the transfer fluid
Goat Anti-RabbitIgG H&L (HRP)	Abacm	Ab6721	Dilution: 1/10000
Intelligent laboratory ultra-pure water machine	Chongqing huachuag water treatment engineering co.,LTD	N/A	Filtration (15 L)

Isoflurane	Shandong Ante Animal Husbandry Technology Co. LTD	15198	Anesthesia was maintained by induction in young rats
LinkIR	FOTIRC	V1.3.2.134	Infrared image analysis software
Low temperature high speed tissue grinder	Wuhan Servicebio technology CO.,LTD	SKZ3F20200191	Tissue grinding
Methanol	Guangdong Guanghua Sci-Tech Co., Ltd	20220519	Configure the transfer fluid
Mini-PROTEAN Tetra	Bole Life Medical Products (Shanghai) Co., Ltd	552BR 233193	Electrophoresis
Multiskan Spectrum Microplate Spectrophotometer	TECAN	Spark	The absorbance and concentration of tissue protein were detected
Pressure-sensing smart gloves	Jinan Super Sense Intelligent Technology Co. LTD	Miiglove	It is used to measure the manipulative strength of the operator
PVDF membrane	MerckMillipore Corporation	IPVH00010	Western Blot
Refrigerated centrifuge	Hettich Precision Technology (Zhuhai) Co., LTD	MIKRO 220R	Centrifuge
Research three-in-one thermal imager	FOTIRC	226S (384 x 288)	Temperature measurement
RIPA lysate	Beijing Solaibao Technology Co., LTD (Solarbio)	R0010	Lytic tissue
SHA-CA digital display water bath thermostatic oscillator	Changzhou Aohua Instrument Co. LTD	SHA-CA	Young rats were used in hypoxia
Six-rat fatigue rotarod apparatus	Shanghai Duoyi Industry Co., LTD	DO01104RT703	CP motor function was detected
Skim milk powder	Guangzhou Saiguo Biotechnology Co., LTD (BIOFROXX)	1172GR500	Confining liquid
Surgical plate	Shanghai YuYAN Scientific Instrument Co. LTD	51002	The model operating table was established in young rats
TS-200 Orbital shaker	Haimen Qilin Bell Manufacturing Co., Ltd.	TS-8S	Gel fixation
Tween 80	MedChemExpress	HY-Y1819	Configure TBST
ZS-MV Portable anesthesia machine	ZHONGSHI SCIENCE &TECHNOLOGY	ZS-MV-I	Anesthesia was induced and maintained in experimental animals