

Skeletal Phenotype Analysis of a Conditional *Stat3* Deletion Mouse Model

Yiling Yang^{*1}, Qianye Chen^{*2}, Siru Zhou¹, Xinyi Gong¹, Hongyuan Xu¹, Yueyang Hong¹, Qinggang Dai³, Lingyong Jiang¹

¹Center of Craniofacial Orthodontics, Department of Oral and Cranio-maxillofacial Science, Ninth People's Hospital, Shanghai Jiaotong University School of Medicine, Shanghai Key Laboratory of Stomatology & Shanghai Research Institute of Stomatology, National Clinical Research center of Stomatology

²Department of Stomatology, Dalian Medical University ³The 2nd Dental Center, Ninth People's Hospital, Shanghai Jiaotong University School of Medicine, Shanghai Key Laboratory of Stomatology & Shanghai Research Institute of Stomatology, National Clinical Research center of Stomatology

* These authors contributed equally

Corresponding Authors

Qinggang Dai
daiqinggang@126.com

Lingyong Jiang
247416218@qq.com

Citation

Yang, Y., Chen, Q., Zhou, S., Gong, X., Xu, H., Hong, Y., Dai, Q., Jiang, L. Skeletal Phenotype Analysis of a Conditional *Stat3* Deletion Mouse Model. *J. Vis. Exp.* (), e61390, doi:10.3791/61390 (2020).

Date Published

July 3, 2020

DOI

10.3791/61390

URL

jove.com/video/61390

Materials

Name	Company	Catalog Number	Comments
4% Paraformaldehyde solution	Sangon biotech Co., Ltd.	E672002	
Acetone	Shanghai Experimental Reagent Co., Ltd.	80000360	
Alizarin	Sigma-Aldrich	A5533	
Ammonia solution	Shanghai Experimental Reagent Co., Ltd.		
Calcein	Sigma-Aldrich	C0875	
<i>Ctsk-Cre</i> mice			a gift from S. Kato, University of Tokyo, Tokyo, Japan
DDSA	Electron Microscopy Sciences	13710	
DeCa RapidlyDecalcifier	Pro-Cure	DX1100	
DMP-30	Electron Microscopy Sciences	13600	
EDTA	Shanghai Experimental Reagent Co., Ltd.	60-00-4	
EMBED 812 RESIN	Electron Microscopy Sciences	14900	
fluorescence microscope	Olympus	IX73	
Hematoxylin solution	Beyotime Biotechnology	C0107	
Micro-CT	Scanco Medical AG	μCT 80	
NaHCO ₃	Shanghai Experimental Reagent Co., Ltd.	10018918	
Neutral balsam	Sangon biotech Co., Ltd.	E675007	
NMA	Electron Microscopy Sciences	19000	
Paraffin	Sangon biotech Co., Ltd.	A601889	
rotary microtome	Leica	RM2265	
<i>Stat3^{fl/fl}</i> mice	GemPharmatech Co., Ltd	D000527	
TRAP staining kit	Sigma-Aldrich	387A	

xylene	Shanghai Experimental Reagent Co., Ltd.	1330-20-7	
--------	---	-----------	--