

2024 6 4

(NCNP)

(Institut Curie)

(JFCR)

(NCU)

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(NCNP)

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( )

(  
Olivier Ayrault

NFIB

DNA

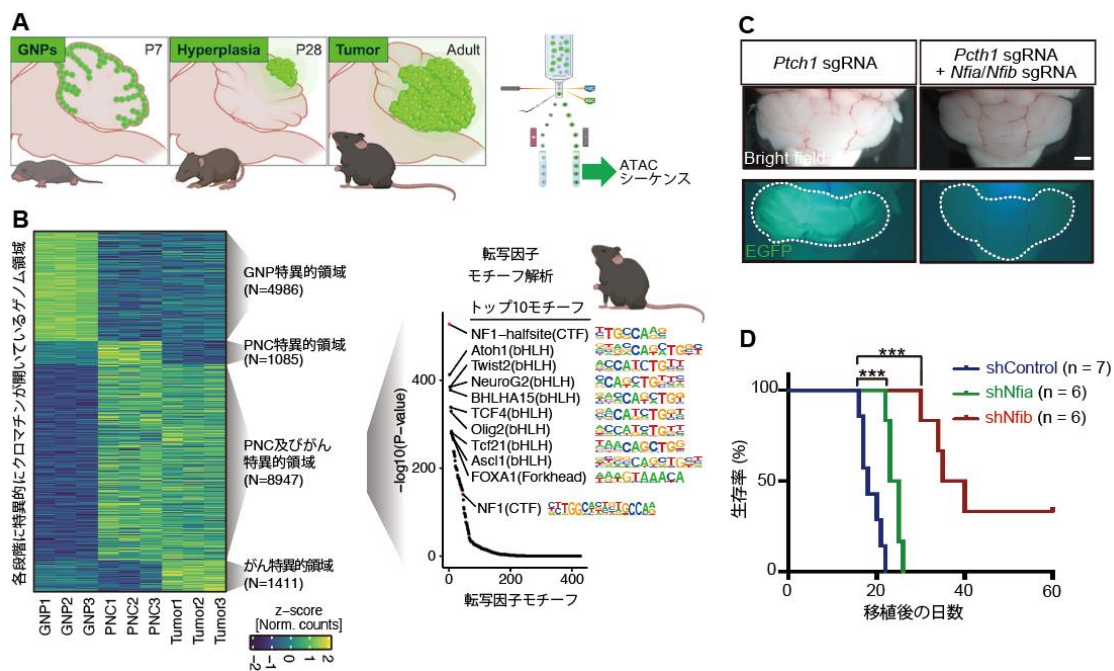
(SHH)  
 (GNP)  
 DNA( ) PNC  
 ( )  
 NFI  
 NFIA NFIB  
 PNC NFIA NFIB  
 (PDX) NFI  
 NFI  
 NFIB SHH  
 SHH  
 Developmental Cell  
 6 3 11 2024 6 4 0 2024

**「研究の背景」**

( )  
 SHH 30  
 GNP SHH  
 SHH  
 ( )

**「研究の内容」**

(1) SHH NFI  
 SHH *Ptch1*  
*spCas9* *Ptch1* *sgPtch1*  
 Atoh1<sup>EGFP</sup>  
 EGFP 28 EGFP  
 GNP PNC FACS  
 (図 1A)



(A) SHH

(B)

(C)

28

*Atoh1*<sup>EGFP</sup>

mm (D)

\*\*\* p < 0.001

RNA

(2) NFI

GNP PNC

NFIA NFIB

PNC

NFIA NFIB

図 2A

*Sox1* *Atoh1*

NFI

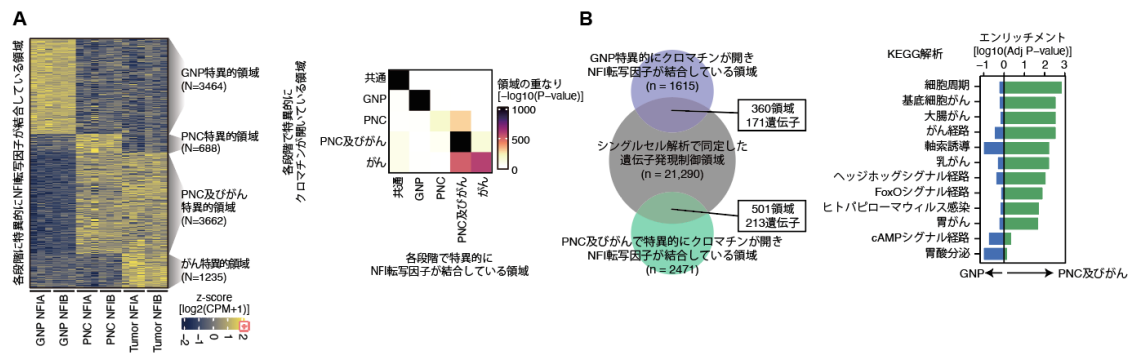
GNP PNC

PNC

NFI

図 2B

NFI



(A)

NFI

(B)

NFI

KEGG

(3) NFI

NFI

shRNA

SHH

NFI

(PDX)

shRNA

NFIB

(図 3A)

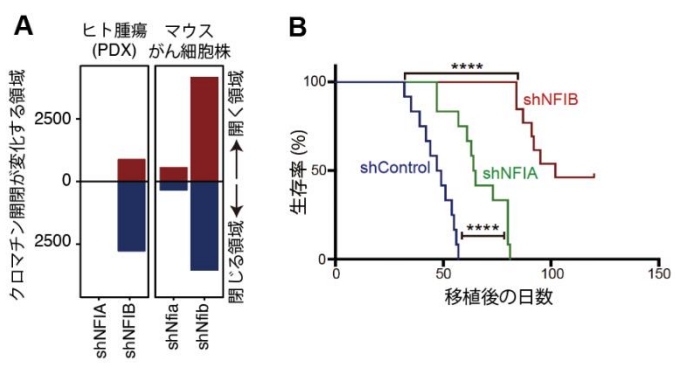
NFIB

(図 3B)

shRNA

NFI

SHH



3: (A) PDX

NFI

(B) PDX

RNA

\*\*\*\* p < 0.0001

(4) NFIB

SHH

NFI

NFIB 388

NFIB

CARM 1

SHH

SHH

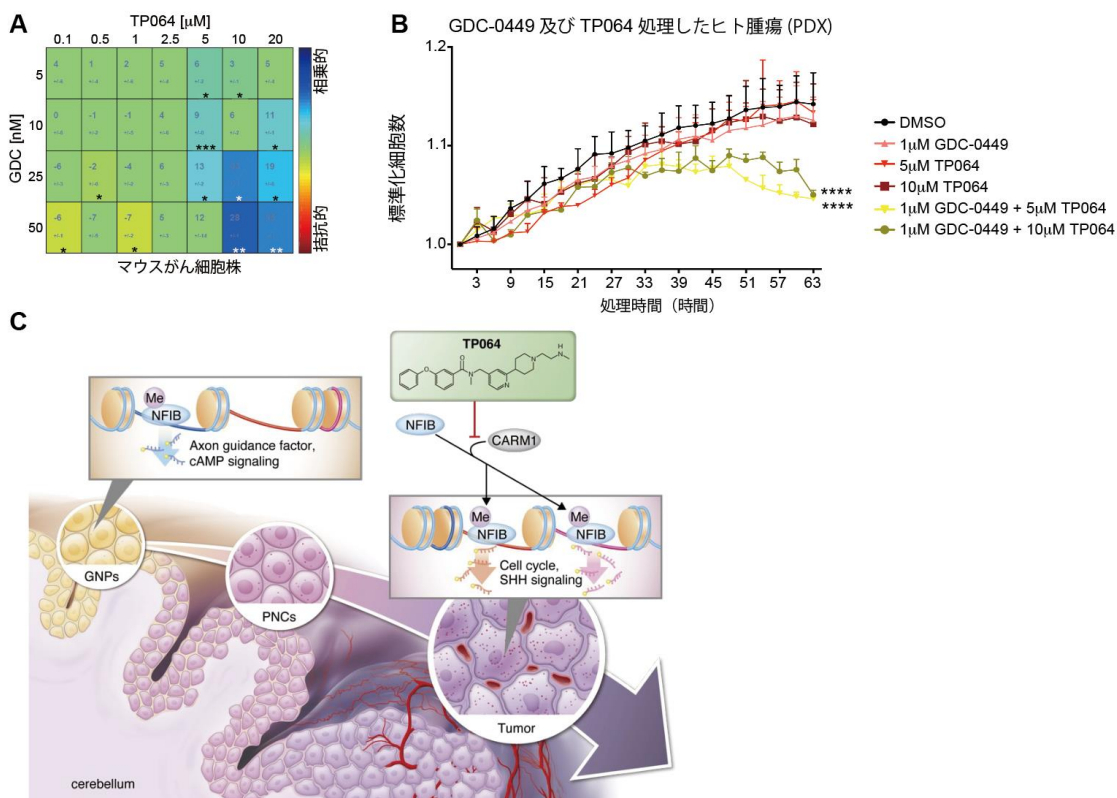
(図 4A)

TP064

SHH

(図 4B)

(図 4C)



: (A) SHH (GDC) CARM1 (TP064)

\*p < 0.05; \*\*p < 0.001; \*\*\*p < 0.0001 (B) GDC-0449

TP064 PDX \*\*\*\* p < 0.0001 (C)

「今後の研究展開および波及効果」

SHH

NFI

SHH

**「掲載雑誌名・DOI」**

Developmental Cell

DOI 10.1016/j.devcel.2024.05.013

**「論文タイトル・著者」**

Cancer-Specific Epigenome Identifies Oncogenic Hijacking by Nuclear Factor I Family Proteins for Medulloblastoma Progression

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Chavez \*\* Olivier Ayrault\*\* \*\*

\* \*\*

**「主な競争的研究資金」**

(AMED (JP22ck0106534  
) (JP23ama221129

**「研究内容に関するお問い合わせ」**

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