M-SRG

遺伝子の概要

Gene Symbol

Synonyms

Rag-2;gc; p64; [g]c; CD132; gamma©

NCBI ID

295953

RGD ID

Ensembl ID

ENSRNOG00000004623

Pubmed

説明

Exon 2-7of IL2rg gene in Rag2-KO(SD) rat were deleted to generate Rag2 and IL2rg knockout rat. *Literature published using this strain should indicate: M-SRG rats (Cat. NO. NR-KO-210360) were purchased from Shanghai Model Organisms Center, Inc..

表現型デ□タ

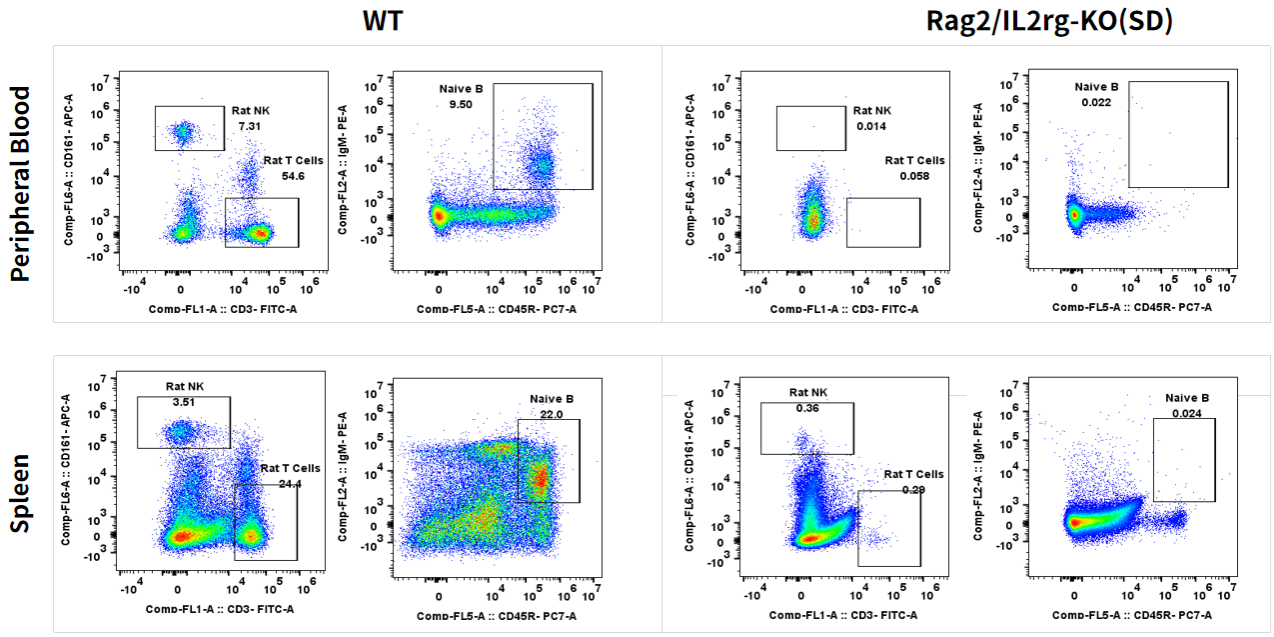

Fig1. Complete deletion of T, B and NK cells of M-SRG rats. Spleen and peripheral blood cells from SD and M-SRG rats were collected to analyze their compositions of T, B and NK cells by FACS.

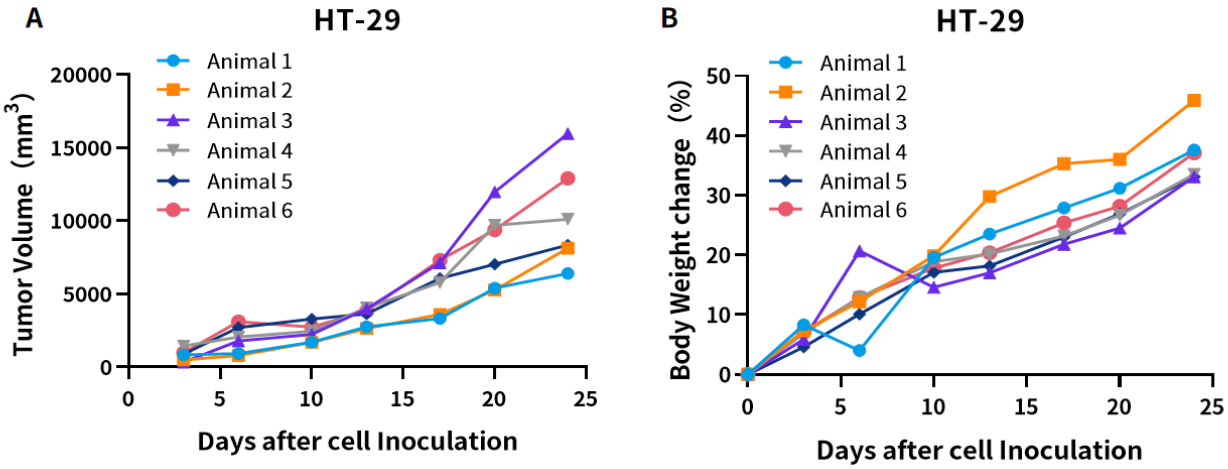

Fig2. Subcutaneous xenograft tumor growth of HT29 cells in M-SRG rats. Human colorectal adenocarcinoma cell line HT-29 (2x10^7) were mixed with Matrigel and inoculated subcutaneously into M-SRG rats (n=6). (A)Tumor volume. (B) Body weight change.

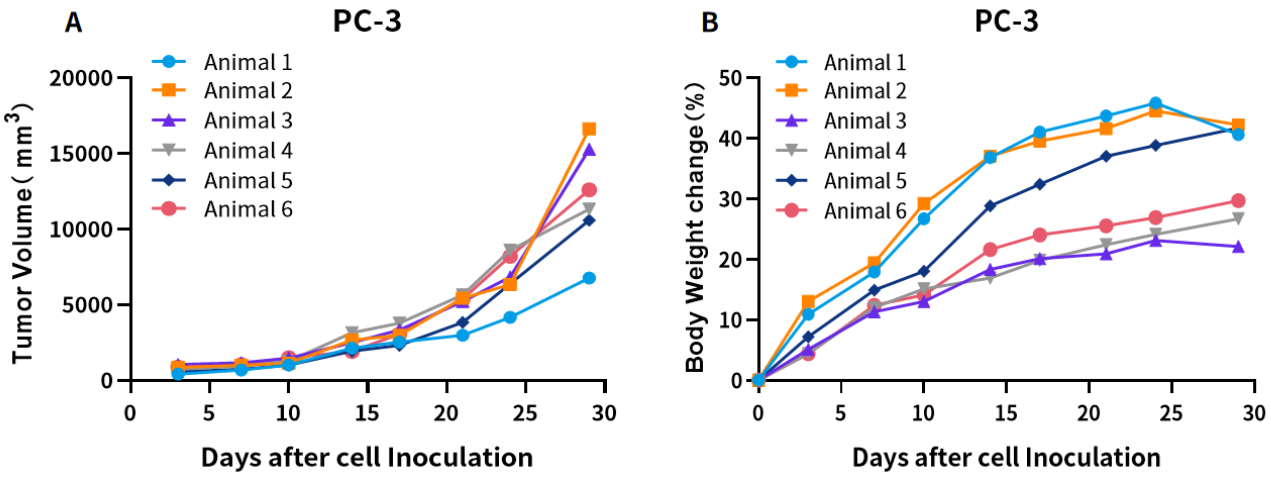

Fig3. Subcutaneous xenograft tumor growth of PC-3 cells in M-SRG rats. Human prostatic adenocarcinoma cell line PC-3 (2x10^7) were mixed with Matrigel and inoculated subcutaneously into M-SRG rats (n=6). (A)Tumor volume. (B) Body weight change.

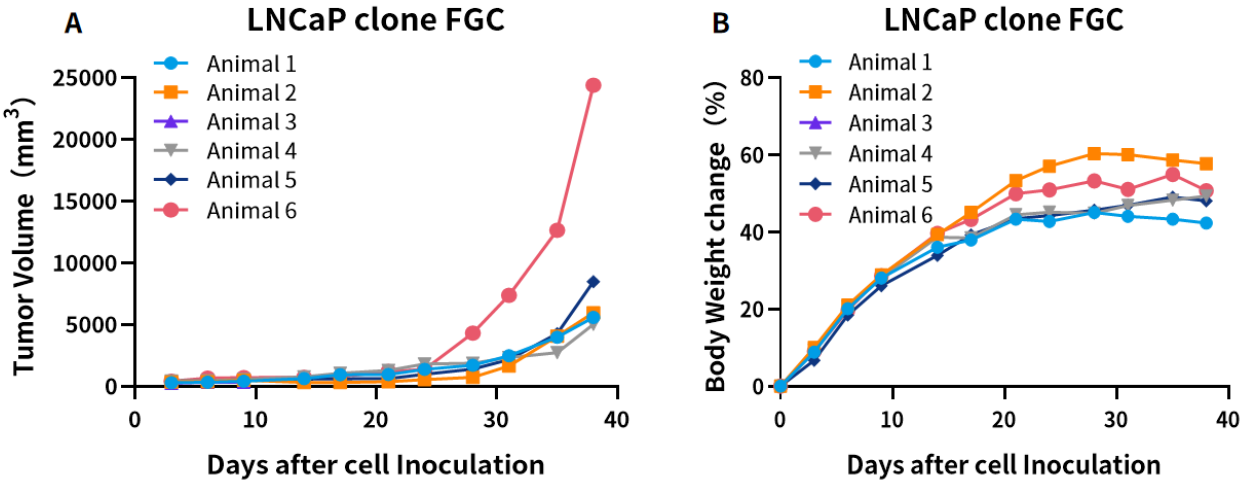

Fig4. Subcutaneous xenograft tumor growth of LNCaP clone FGC cells in M-SRG rats. Human metastatic prostate carcinoma cell line LNCaP clone FGC (2x10^7) were mixed with Matrigel and inoculated subcutaneously into M-SRG rats (n=6). (A)Tumor volume. (B) Body weight change.

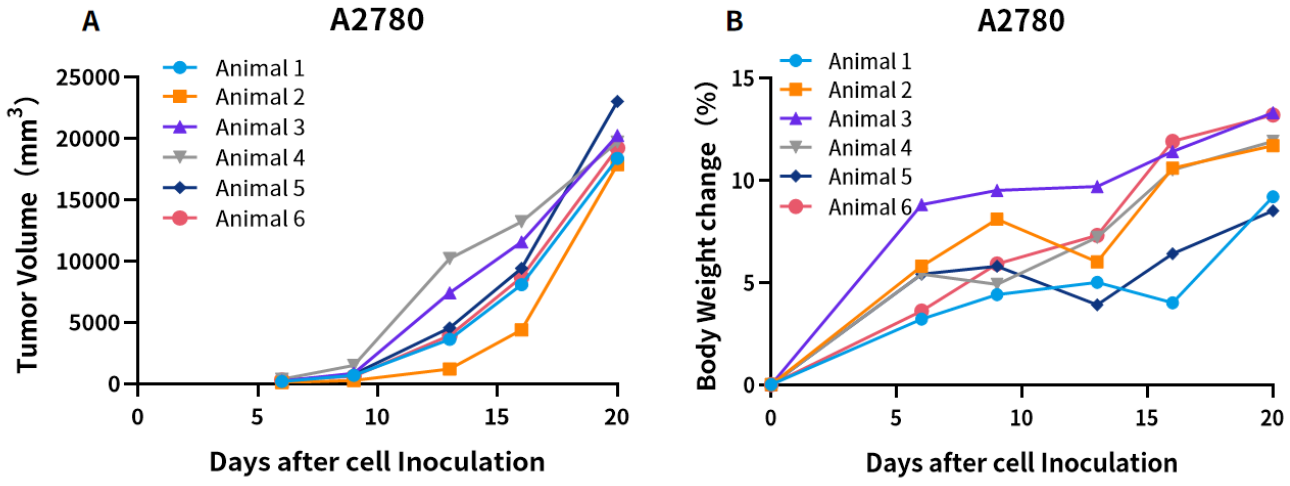

Fig5. Subcutaneous xenograft tumor growth of A2780 cells in M-SRG rats. Human ovarian cancer cell line HT-29 (1x10^7) were mixed with Matrigel and inoculated subcutaneously into M-SRG rats (n=6). (A)Tumor volume. (B) Body weight change.

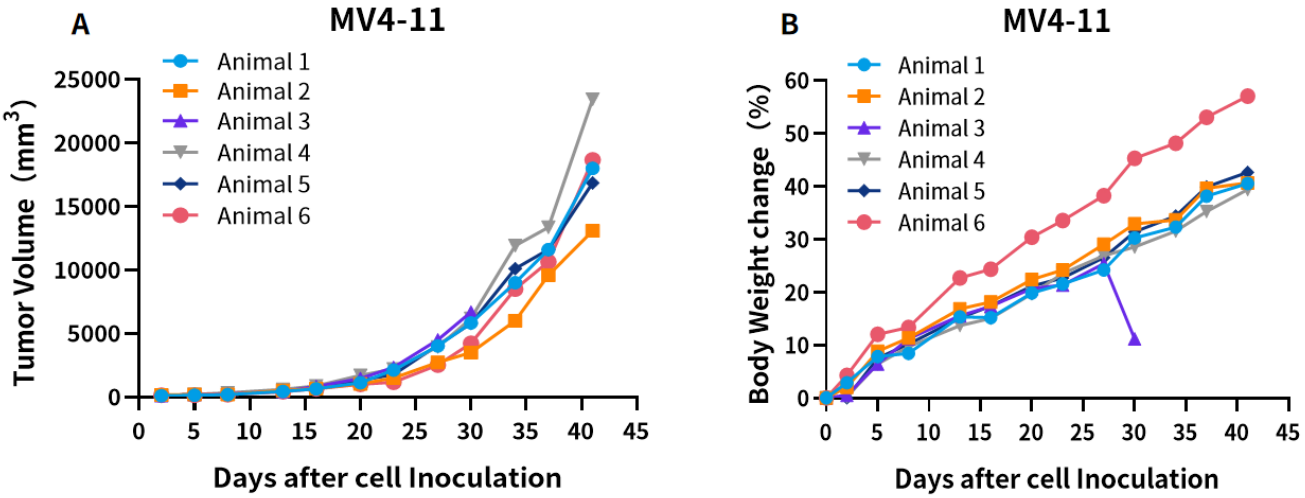

Fig6. Subcutaneous xenograft tumor growth of MV4-11 cells in M-SRG rats. Human monocytic leukemia cell line MV4-11 (1x10^7) were mixed with Matrigel and inoculated subcutaneously into M-SRG rats (n=6). (A)Tumor volume. (B) Body weight change.

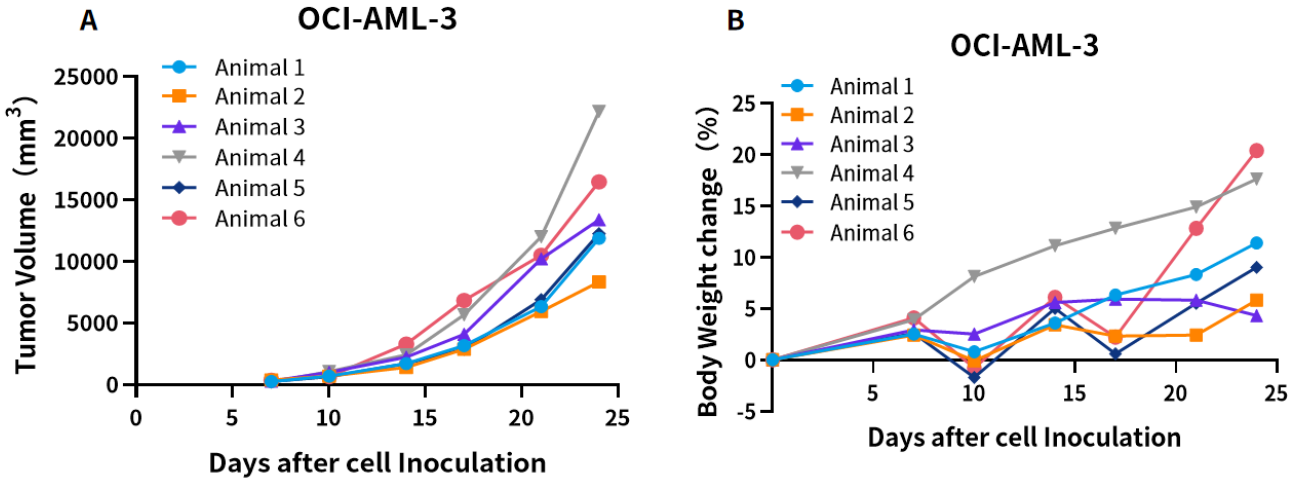

Fig7. Subcutaneous xenograft tumor growth of OCI-AML-3 cells in M-SRG rats. Human acute myeloid leukemia cell line OCI-AML-3 (1x10^7) were mixed with Matrigel and inoculated subcutaneously into M-SRG rats (n=6). (A) Tumor volume. (B) Body weight change.

Parameter	Units	SD; Male 7-8 weeks; n=10	SD; Female 7-8 weeks; n=10	Rag2/Il2rg-KO(SD); Male 7-8 weeks; n=10	Rag2/Il2rg-KO(SD); Female 7-8 weeks; n=10
WBC	10^3 cells/μL	10.68±0.80	10.63±0.83	2.14±0.18	1.62±0.09
RBC	10^6 cells/μL	7.32±0.40	6.71±0.31	6.99±0.24	6.23±0.24
HGB	g/dL	15.99±0.79	14.40±0.64	15.30±0.34	13.03±0.29
HCT	%	46.75±2.07	42.68±1.85	45.00±0.89	38.35±0.94
MCV	fL	64.12±0.69	63.73±0.55	64.80±1.53	61.97±1.44
MCH	pg	21.89±0.16	21.49±0.20	22.02±0.53	21.08±0.56
MCHC	g/dL	34.14±0.23	33.72±0.15	33.98±0.15	34.00±0.16
PLT	10^6 cells/μL	0.82±0.13	0.57±0.13	1.00±0.16	1.20±0.13
RDW-SD	fL	29.58±1.29	27.96±0.69	45.74±2.36	37.35±1.67
RDW-CV	%	13.24±0.48	12.09±0.38	19.97±0.43	16.90±0.45
PDW	fL	8.41±0.17	9.23±0.46	9.35±0.25	8.75±0.10
MPV	fL	8.05±0.18	8.41±0.17	8.65±0.22	8.21±0.06
P-LCR	%	11.15±1.51	14.02±1.51	16.42±2.00	11.75±0.46
PCT	%	0.56±0.08	0.44±0.09	0.91±0.14	0.97±0.09
NEUT#	10^3 cells/μL	1.21±0.32	0.82±0.09	0.61±0.07	0.85±0.11
LYMPH#	10^3 cells/μL	8.78±0.83	9.14±0.79	0.98±0.13	0.37±0.08
MONO#	10^3 cells/μL	0.61±0.09	0.59±0.07	0.51±0.05	0.37±0.04
EO#	10^3 cells/μL	0.07±0.01	0.07±0.02	0.03±0.01	0.03±0.01
BASO#	10^3 cells/μL	0.02±0.00	0.02±0.00	0.01±0.00	0.00±0.00
NEUT%	%	12.01±3.59	8.56±1.71	30.25±4.16	52.03±5.93
LYMPH%	%	81.67±3.58	85.29±1.74	44.18±4.09	23.48±5.26
MONO%	%	5.50±0.44	5.41±0.54	23.92±0.90	22.53±1.83
EO%(%)	%	0.67±0.14	0.60±0.11	1.37±0.29	1.82±0.41
BASO%	%	0.15±0.02	0.14±0.02	0.28±0.10	0.14±0.09
RET#	10^6 cells/μL	0.46±0.06	0.41±0.04	0.63±0.03	0.46±0.02
RET%	%	6.78±1.10	6.31±0.57	9.22±0.64	7.57±0.52
LFR(%)	%	53.65±7.53	45.62±5.63	40.47±1.50	39.05±1.30
MFR(%)	%	11.88±1.24	14.12±0.64	13.87±0.26	13.32±0.40
HFR(%)	%	34.47±6.69	40.26±5.16	45.66±1.39	47.63±1.50
IRF(%)	%	46.35±7.53	54.38±5.63	59.53±1.50	60.95±1.30

Fig8. Blood Routine Tests in M-SRG rats.

Parameter	Units	SD; Male 7-8 weeks; n=10	SD; Female 7-8 weeks; n=10	Rag2/Il2rg-KO(SD); Male 7-8 weeks; n=10	Rag2/Il2rg-KO(SD); Female 7-8 weeks; n=10
ALB	g/L	28.10±0.82	30.40±0.45	35.40±0.60	35.10±1.10
ALP	U/L	1470.00±105.85	961.60±62.60	1131.00±56.23	783.30±37.81
ALT	U/L	46.50±2.95	43.50±3.18	63.90±7.00	74.40±5.42
AST	U/L	142.70±7.26	139.70±7.71	223.20±17.54	162.60±8.11
GGT	U/L	0.16±0.08	0.39±0.11	0.28±0.20	0.13±0.04
T-BIL	μmol/L	1.22±0.28	0.75±0.09	1.44±0.19	0.91±0.11
TP	g/L	59.30±1.40	62.90±1.22	69.60±1.60	65.70±2.21
CRE	μmol/L	21.34±0.72	20.18±0.76	23.91±0.45	26.69±1.02
BUN	mmol/L	6.28±0.36	5.76±0.25	6.60±0.26	5.16±0.23
TCHO	mmol/L	1.93±0.05	2.00±0.09	2.25±0.10	2.24±0.11
TG	mmol/L	1.73±0.28	0.69±0.10	0.70±0.09	0.41±0.04
HDL	mmol/L	1.14±0.05	1.39±0.06	1.69±0.08	1.58±0.07
LDL	mmol/L	0.67±0.09	0.63±0.04	1.34±0.06	1.30±0.02
NEFA	mmol/L	0.72±0.15	0.72±0.11	1.03±0.14	0.74±0.04
Ca	mmol/L	3.14±0.04	3.07±0.03	3.19±0.05	3.16±0.06
CL	mmol/L	96.29±1.12	96.83±0.84	66.62±1.37	63.48±1.31
IP	mmol/L	3.28±0.17	2.82±0.14	3.90±0.11	3.57±0.19
K	mmol/L	7.07±0.27	6.09±0.20	8.07±0.28	7.39±0.36
Na	mmol/L	144.01±4.40	159.32±2.79	116.43±6.66	125.36±5.53
CK	U/L	1880.30±182.21	1317.70±159.22	2218.33±244.28	1935.90±259.94
GLU	mmol/L	8.73±0.69	6.67±0.20	7.00±0.57	7.83±0.39

Fig9. Blood biochemistry in M-SRG rats.