COMMITTED TO RESEARCH FOR MORE THAN 60 YEARS

Founded in 1960, JANVIER LABS is an independent company specialised in breeding of laboratory rodents and associated services.

As an international player of biomedical research, JANVIER LABS provides a complete offer dedicated to rodent research models: model creation, reproductive sciences, customized breeding and laboratory services.

JANVIER LABS offers solutions adapted to your needs in order to ensure the success of your research programmes.

JANVIER LABS HAS THE LARGEST AND MOST ADVANCED BREEDING SITE IN EUROPE

1 unique production site
in Europe
22,000 sqm of facilities
on more than 8 hectares

Breeding capacity
3,000,000
rodents a year

45,000 km
a week travelled
by our integrated
transport department

3,000 customers
on the 5 continents
300 international
employees

60 YEARS EXPERTISE

JANVIER LABS supplies immunodeficient models with the highest standards. With the support of our expert teams and with our unique and state-of-the-art site in Europe, we ensure rigorous breeding conditions and a high standard of scientific expertise to guarantee the success of your research programmes.

ONE SOLE MICROBIOTA
All our models have the same microbiota that is analyzed, monitored and stable over time
03

GENETIC STABILITY
JANVIER LABS GENETIC POLICY® allows us to ensure the genetic homogeneity of all our strains
04

SOPF HEALTH QUALITY
Our rigorous health policy ensures the highest health standards for your models
02

SCIENTIFIC SUPPORT
An expert team supports you for the model choice at each step of your research project
05

IMMUNO-PHENOTYPING BY CENTRE IMMUNOPHENOMIQUE (CIPHE)
We work with immunology experts for a comprehensive characterization of our models
01

TRANSPORT
Our 100% in-house transport department ensures the welfare of your models and a delivery flexibility
06

OUR 360°
IMMUNODEFICIENT MODELS
ADDED VALUE FOR YOUR RESEARCH

JANVIER LABS offers a range of immunodeficient models that are entirely characterized to support you during your research programmes.

INTERESTS AND FIELDS OF APPLICATION OF OUR IMMUNODEFICIENT MODELS

JANVIER LABS research models show different immunodeficiency levels so that each of your studies benefit from a model having its own immune characteristics. They cover numerous study areas such as:

- ✗ Infectious pathologies

- ✗ The understanding of immune system and of its mechanisms

- ✗ The development of new vaccines and immunotherapy products

- ✗ Tissue grafts including tumors

- ✗ The development and the optimisation of anti-cancer immunotherapies

- ✗ The development of new imaging methods

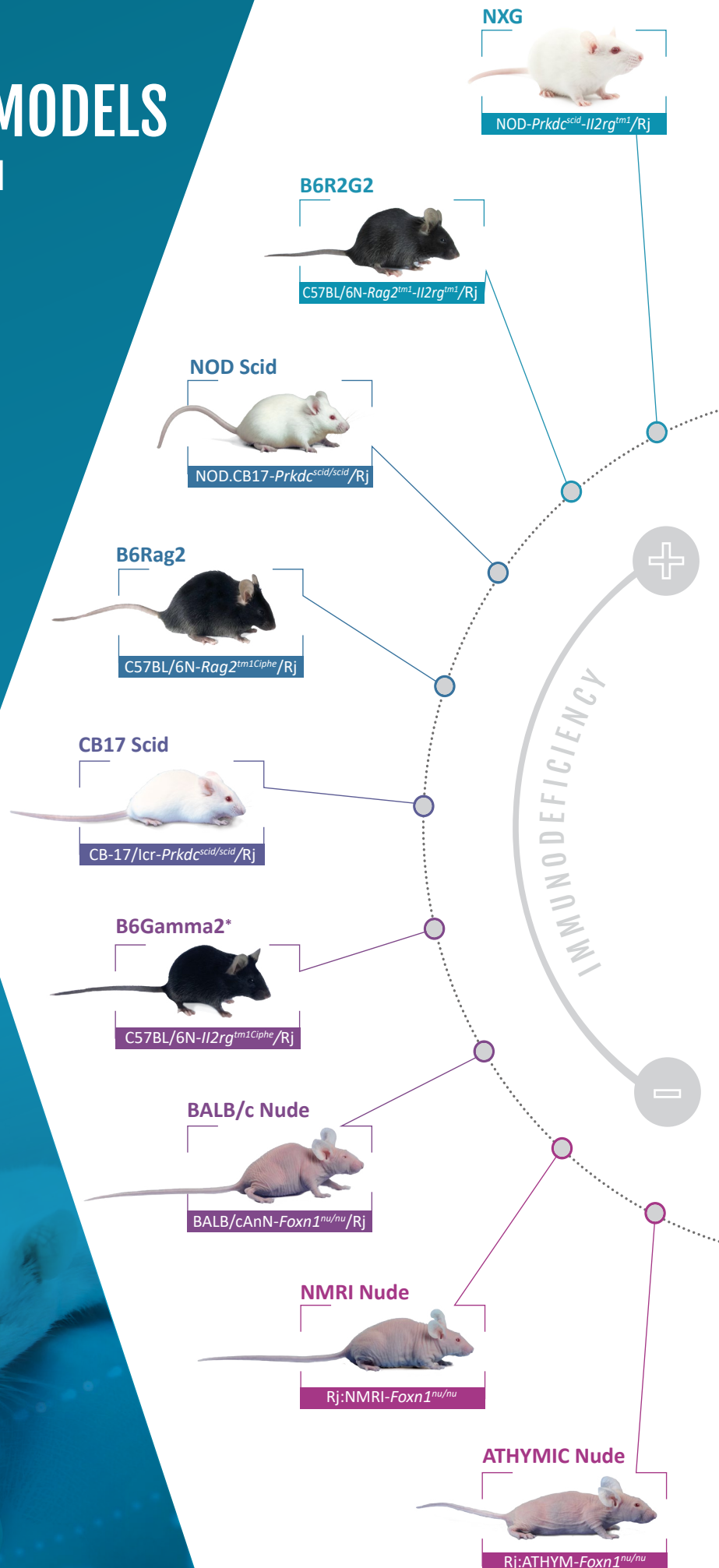- ✗ The understanding of agents responsible for producing inflammation

YOU DO NOT FIND YOUR MODEL?

Have your model created by immunology experts
We work with the Centre Immunophénomique in Marseilles, France, to provide an integrated offer:
- ✗ Creation
- ✗ Immunophenotyping
- ✗ Customized Breeding
- ✗ Laboratory services
- ✗ Transport

Contact us

NXG
NOD-$Prkdc^{scid}$-$Il2rg^{tm1}$/Rj

B6R2G2
C57BL/6N-$Rag2^{tm1}$-$Il2rg^{tm1}$/Rj

NOD Scid
NOD.CB17-$Prkdc^{scid/scid}$/Rj

B6Rag2
C57BL/6N-$Rag2^{tm1Ciphe}$/Rj

CB17 Scid
CB-17/Icr-$Prkdc^{scid/scid}$/Rj

B6Gamma2*
C57BL/6N-$Il2rg^{tm1Ciphe}$/Rj

BALB/c Nude
BALB/cAnN-$Foxn1^{nu/nu}$/Rj

NMRI Nude
Rj:NMRI-$Foxn1^{nu/nu}$

ATHYMIC Nude
Rj:ATHYM-$Foxn1^{nu/nu}$

IMMUNODEFICIENCY

OUR IMMUNODEFICIENT MOUSE MODELS

	NXG	B6R2G2	NOD Scid	B6Rag2	CB17 Scid	B6 Gamma2*	BALB/c Nude	NMRI Nude	ATHYMIC Nude
Background	NOD	C57BL/6NRj	NOD	C57BL/6NRj	CB17	C57BL/6NRj	BALB/c	NMRI	BALB/c
Breeding	Inbred	Inbred	Inbred	Inbred	Inbred	Inbred	Inbred	Outbred	Outbred
Coat	Albino	Black	Albino	Black	Albino	Black	Nude	Nude	Nude
Lymph T	Absent	Absent	Absent	Absent	Absent	+/-	Absent	Absent	Absent
Lymph B	Absent	Absent	Absent	Absent	Absent	+/-	Normal	Normal	Normal
Leakiness	-	-	Medium	-	High	-	-	-	-
NK cell	Absent	Absent	Dysfunctional	Normal	Low	Absent	Normal	Normal	Normal
Dendritic cells	Dysfunctional	Dysfunctional	Low	Dysfunctional	Low	+/-	Normal	Normal	Normal
Macrophages	Dysfunctional	Normal	Dysfunctional	Normal	Dysfunctional	Normal	Normal	Normal	Normal
Complement	-	Normal	-	Normal	Normal	Normal	Normal	Normal	Normal
Irradiation tolerance	Low	High	Low	High	Low	High	High	High	High
Life span	89 Wk.	Min 54 Wk.	36 Wk.	Min 54 Wk.	36 Wk.	Min 54 Wk.	54 Wk.	54 Wk.	54 Wk.
Humoral immunity	Absent	Absent	Absent	Absent	Absent	Absent	Normal	Normal	Normal
Lymphoma outcome	Low	Indefinite	High	Indefinite	Low	Indefinite	Indefinite	Indefinite	Indefinite
Gene of interest	Scid (Prkdc) IL2rg Sirpa	RAG 2 IL2rg	Scid (Prkdc)	RAG 2	Scid (Prkdc)	IL2rg	Foxn1	Foxn1	Foxn1

*Cryopreserved

PHENOTYPIC CHARACTERISATION

All our models are entirely characterized. The immunological and haematological parameters were characterized by Centre Immunophénomique in Marseilles, France.

01 HAEMATOLOGICAL PARAMETERS

Designation	Unit
Red Blood Cells absolute count	(x1E6/uL)
PLaTelets absolute count	(x1E3/uL)
RETiculocyte absolute count	(x1E3/uL)
White Blood Counts	(x1E3/uL)
RETiculocyte percentage	(%)
HematoCriTe	(%)
Mean Corpuscular Hemoglobin	(pg)
HemoGloBin	(g/dL)
Mean Corpuscular Hemoglobin Concentration	(g/dL)
Mean Corpuscular Volume	(f1-)
Platelet Larger Cell Ratio	(0/0)
PlateletCrite	(%)
Low Fluorescence ratio Reticulocyte	(%)
Medium Fluorescence ratio Reticulocyte	(%)
High Fluorescence ratio Reticulocyte	(%)
Immature Reticulocyte Fraction	(%)

All our immunodeficient models were immunophenotyped.
Example of a cytometric analysis of the spleen of our B6R2G2 and C57BL/6N (Wild Type) models.
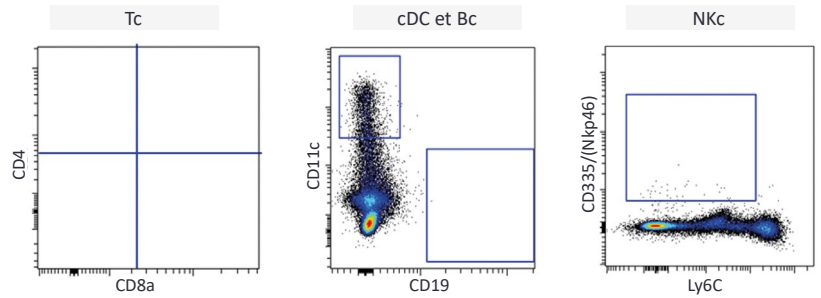
Contact us

SPLEEN

THYMUS

PERIPHERAL BLOOD

BONE MARROW

All lymphoid organs of our models were analysed in most of the 12 cell populations below.

B6R2G2 C57BL/6N-*Rag2^{tm1}-Il2rg^{tm1}*/Rj

Tc | cDC et Bc | NKc

C57BL/6N *C57BL/6NRj*

Tc | cDC et Bc | NKc

01	NEUTROPHILS	
02	MONOCYTES	
03	EOSINOPHILS	
04	Bc	
05	B1 B-Cells	
06	B2 B-Cells	

12 POPULATIONS

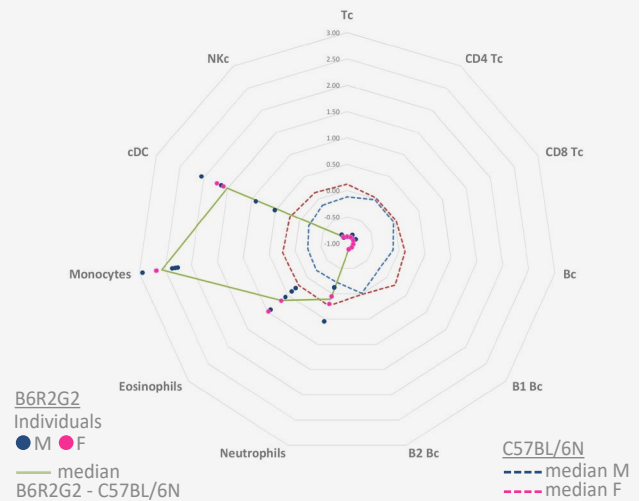|	
L-T	07
CD8 T-Cells	08
eff. CD8 T-Cells	09
CD4 T-Cells	10
eff. CD4 T-Cells	11
NK cells	12
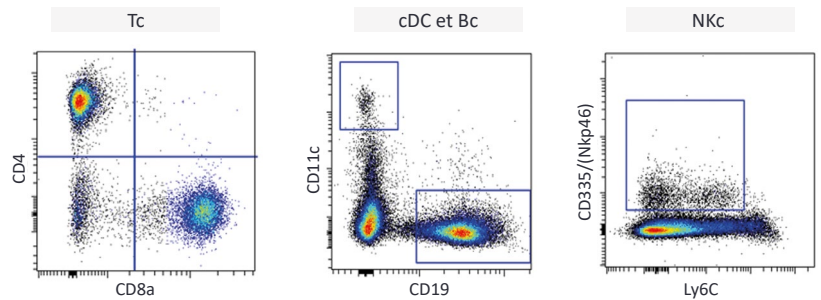
We also offer an immunophenotyping service for the immunodeficient models at each stage of your research protocols.

Contact us

RADAR COMPARISON CHART B6R2G2 VS C57BL/6N

B6R2G2
Individuals
● M ● F
— median
B6R2G2 - C57BL/6N

C57BL/6N
---- median M
---- median F

OUR IMMUNODEFICIENT RAT MODELS

In order to have a range that is as comprehensive as possible, JANVIER LABS also offers immunodeficient rat models.
All our rat models have no T lymphocyte.

FISCHER Nude
F344/HanZtm-*Foxn1^{rnu}*/Rj

LOU Nude*
LOU/M-*Foxn1^{rnu}*/Rj

ATHYMIC Nude
Rj:ATHYM-*Foxn1^{rnu}*

*Cryopreserved