FIGURE 1

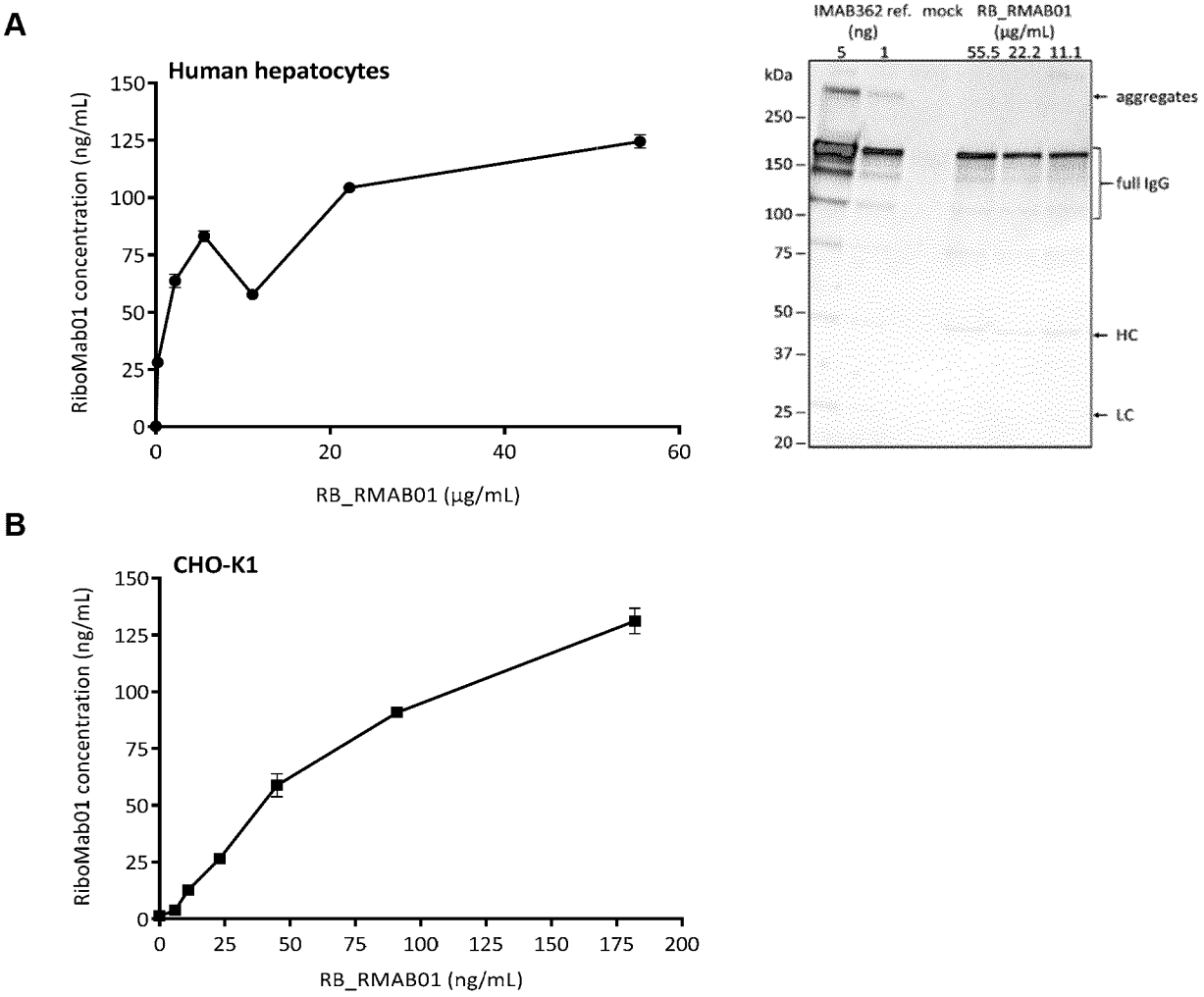

A
Human hepatocytes
RiboMab01 concentration (ng/mL)
RB_RMAB01 (µg/mL)
IMAB362 ref. (ng)
mock
RB_RMAB01 (µg/mL)
kDa
aggregates
full IgG
HC
LC
B
CHO-K1
RiboMab01 concentration (ng/mL)
RB_RMAB01 (ng/mL)

FIGURE 2

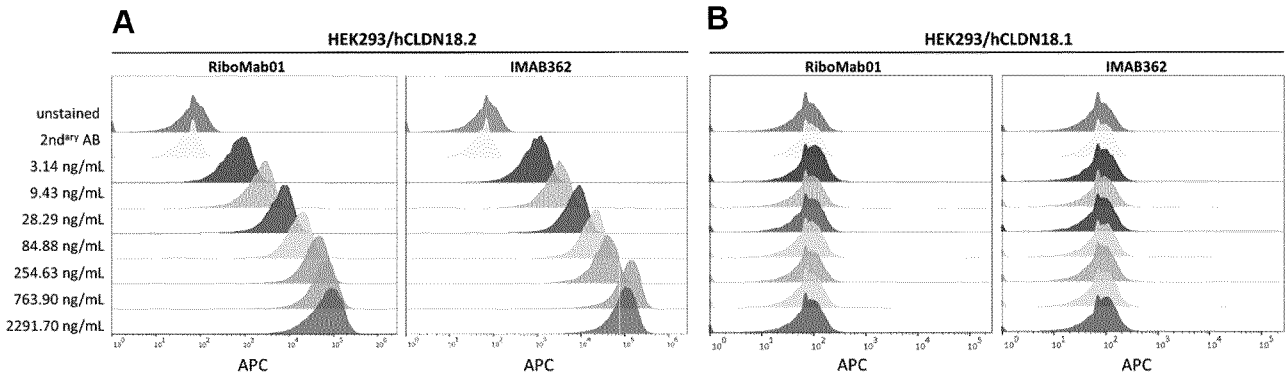


FIGURE 3

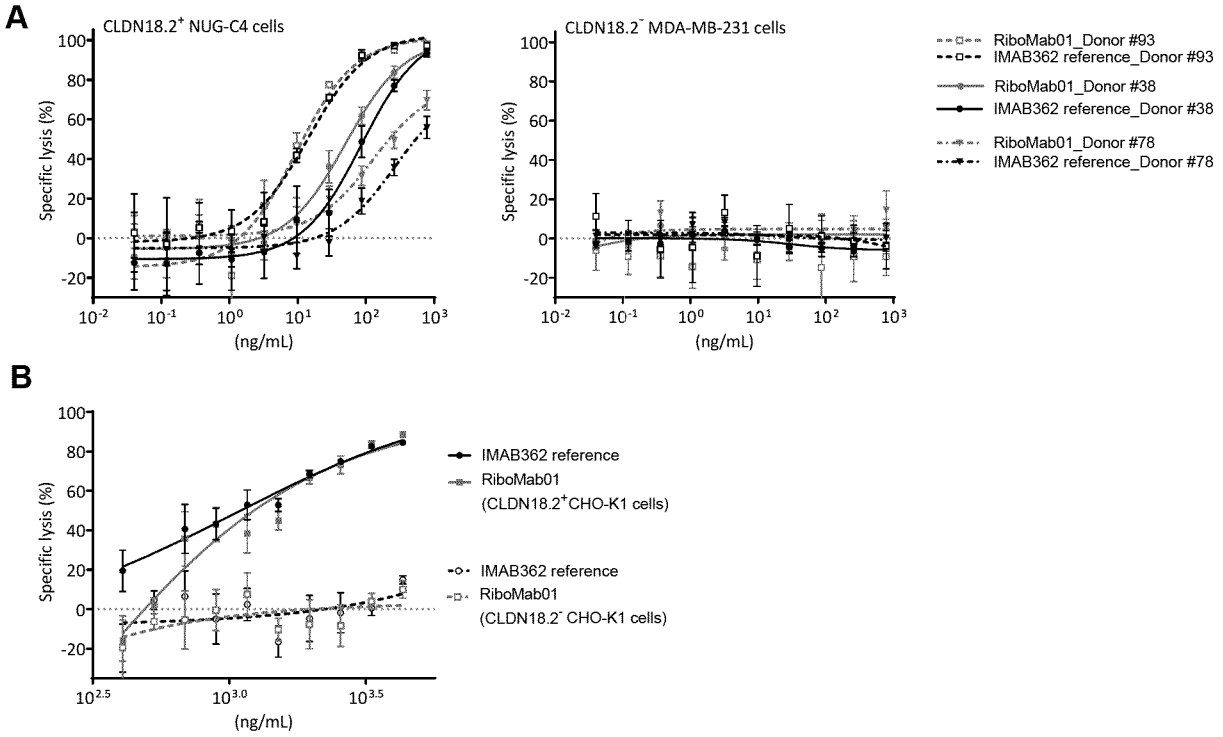
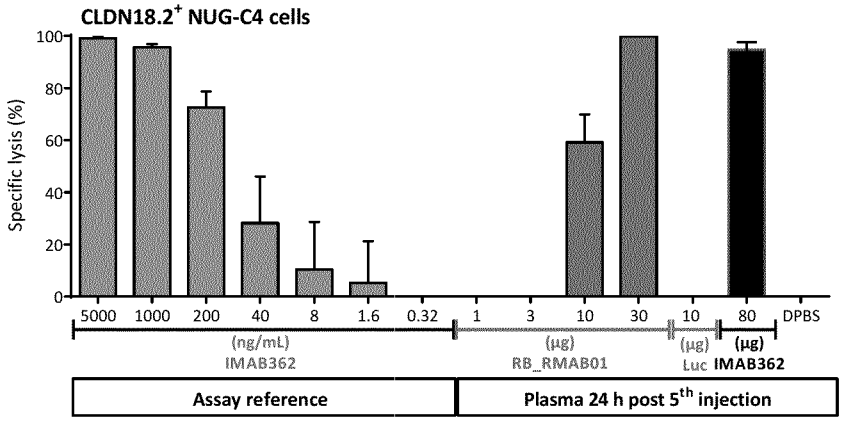


FIGURE 4

A


CLDN18.2+ NUG-C4 cells
Specific lysis (%)
100
80
60
40
20
0
5000 1000 200 40 8 1.6 0.32 1 3 10 30 10 80 DPBS
(ng/mL) IMAB362
(µg) RB_RMAB01
(µg) (µg) Luc IMAB362
Assay reference
Plasma 24 h post 5th injection

B

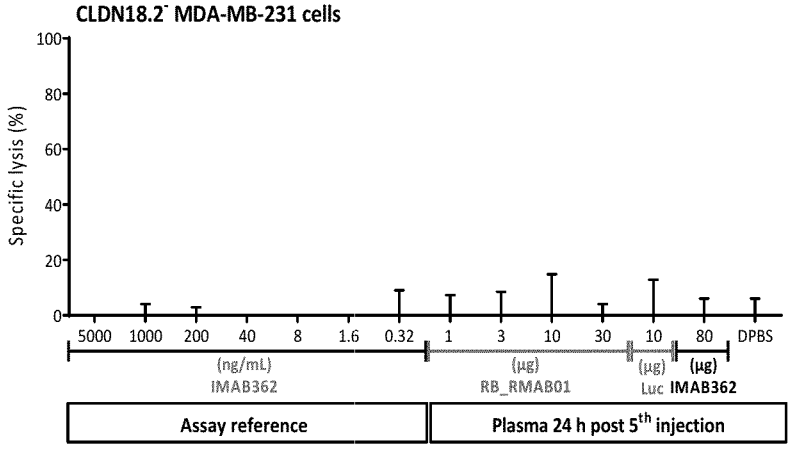

CLDN18.2- MDA-MB-231 cells
Specific lysis (%)
100
80
60
40
20
0
5000 1000 200 40 8 1.6 0.32 1 3 10 30 10 80 DPBS
(ng/mL) IMAB362
(µg) RB_RMAB01
(µg) (µg) Luc IMAB362
Assay reference
Plasma 24 h post 5th injection

FIGURE 5

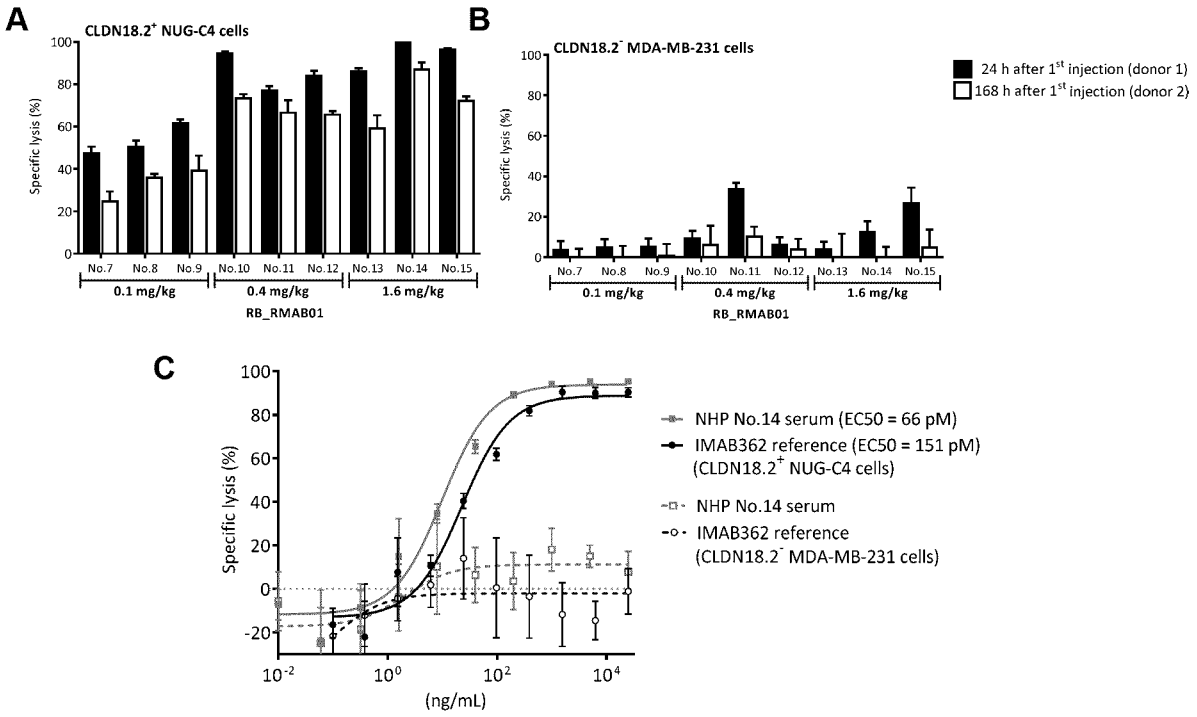


FIGURE 6

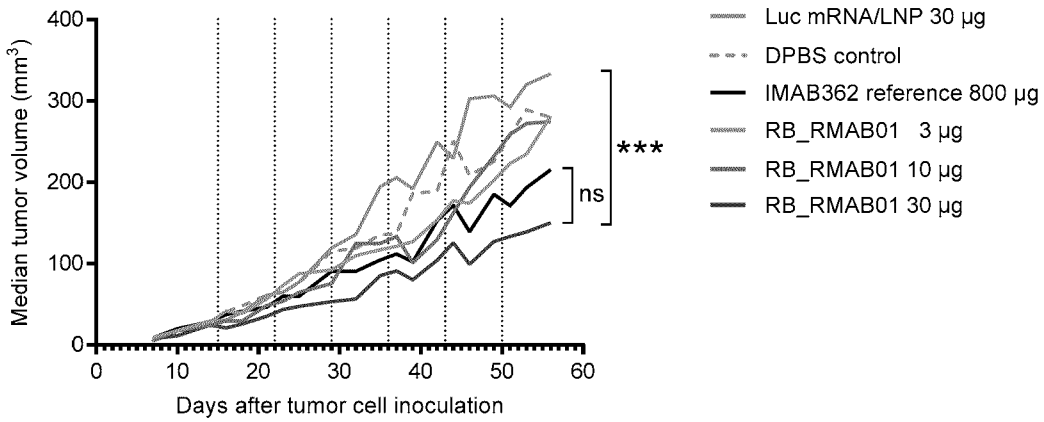


FIGURE 7

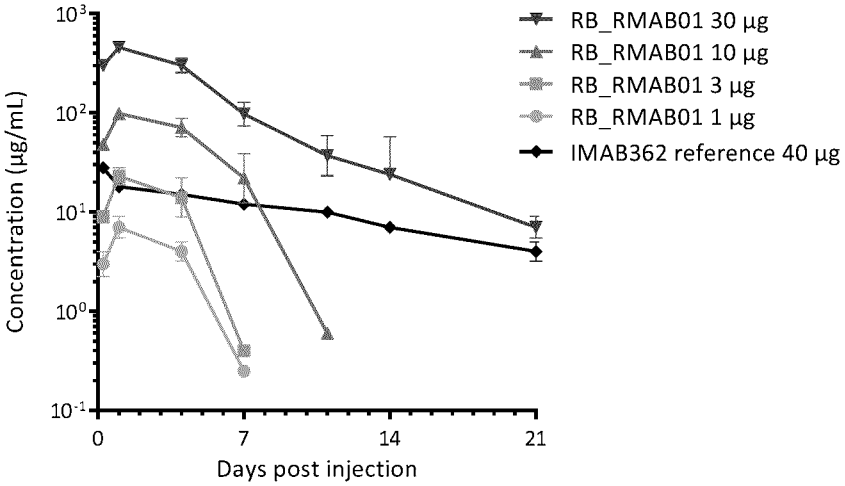


FIGURE 8

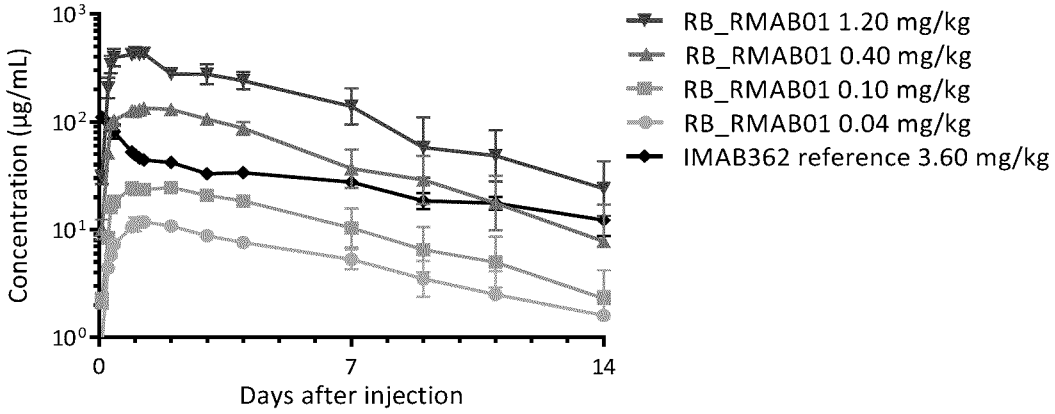


FIGURE 9

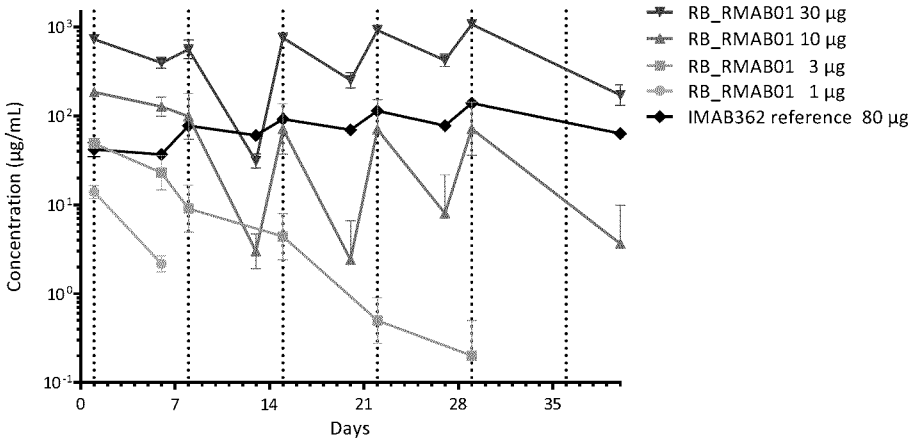


FIGURE 10

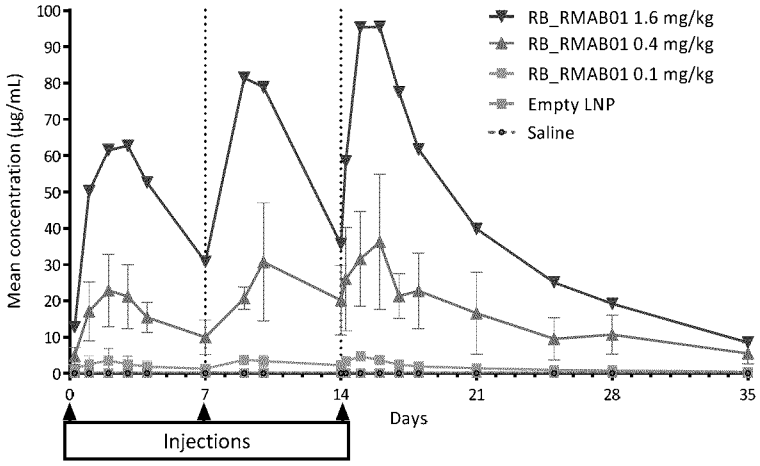
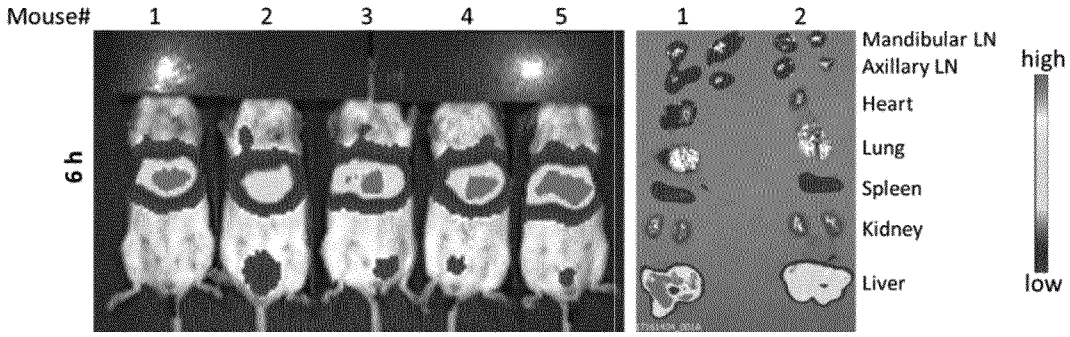


FIGURE 11

A


Mouse#
1
2
3
4
5
1
2
6 h
Mandibular LN
Axillary LN
Heart
Lung
Spleen
Kidney
Liver
high
low

B

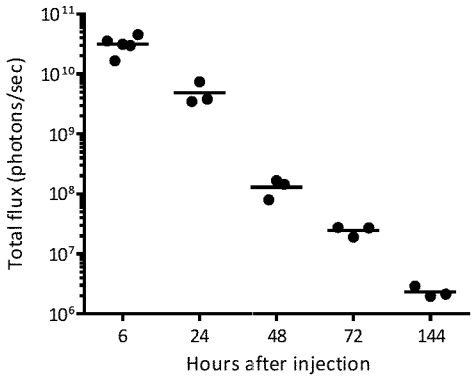

Total flux (photons/sec)
10^{11}
10^{10}
10^{9}
10^{8}
10^{7}
10^{6}
6
24
48
72
144
Hours after injection

FIGURE 12

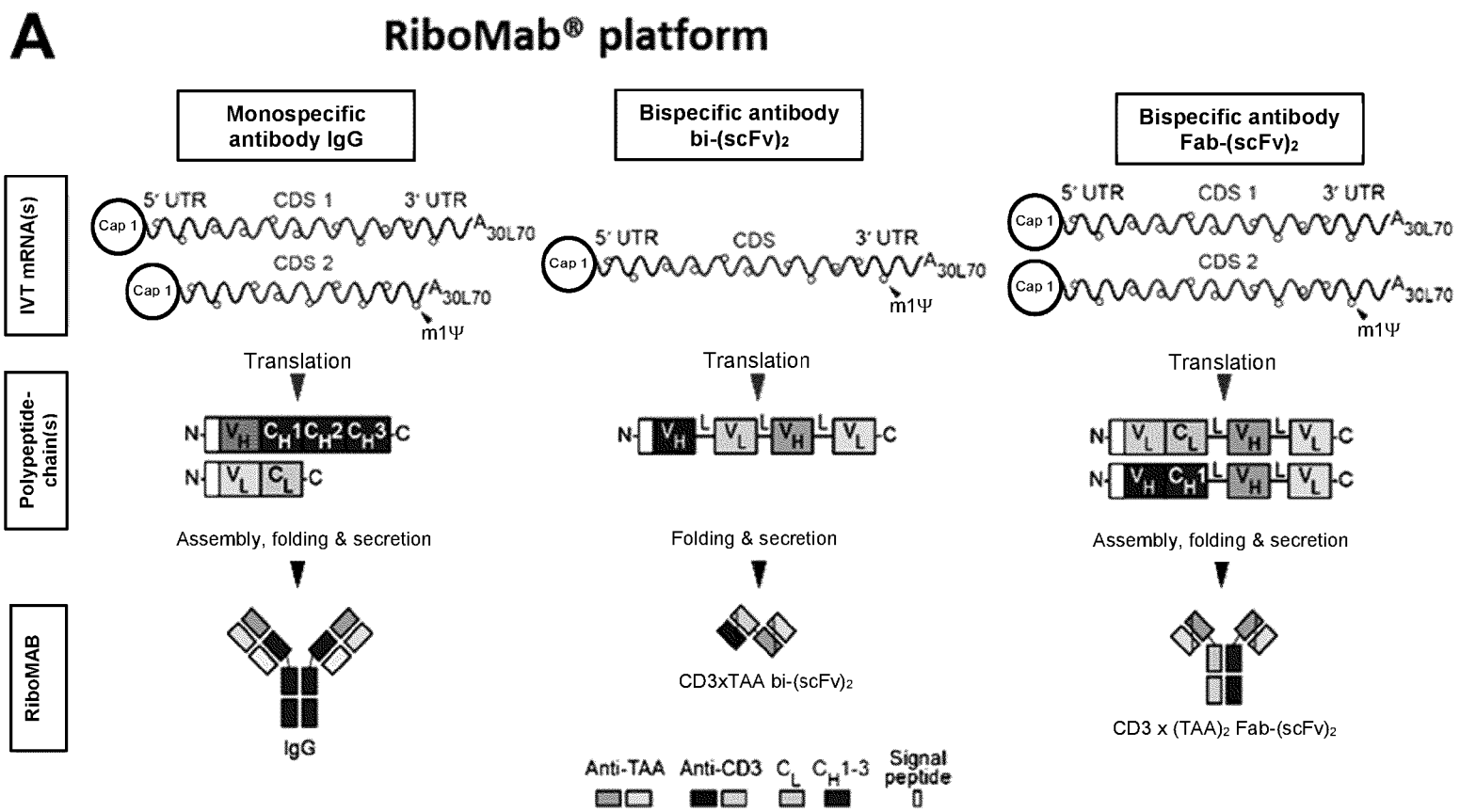
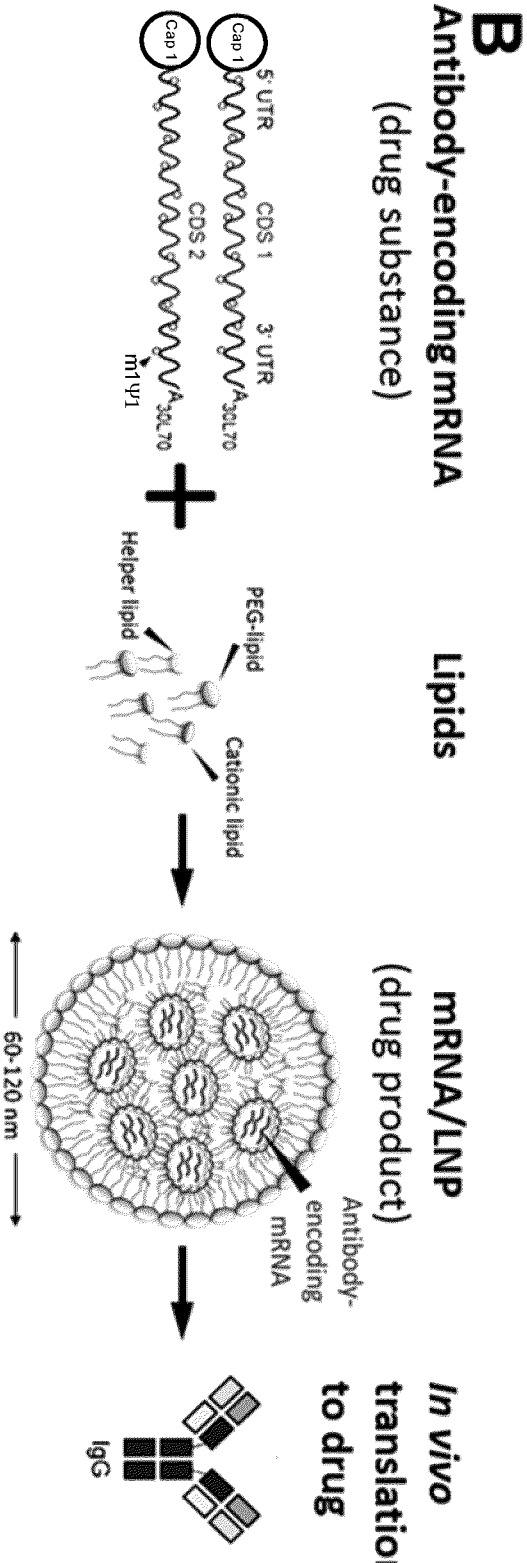
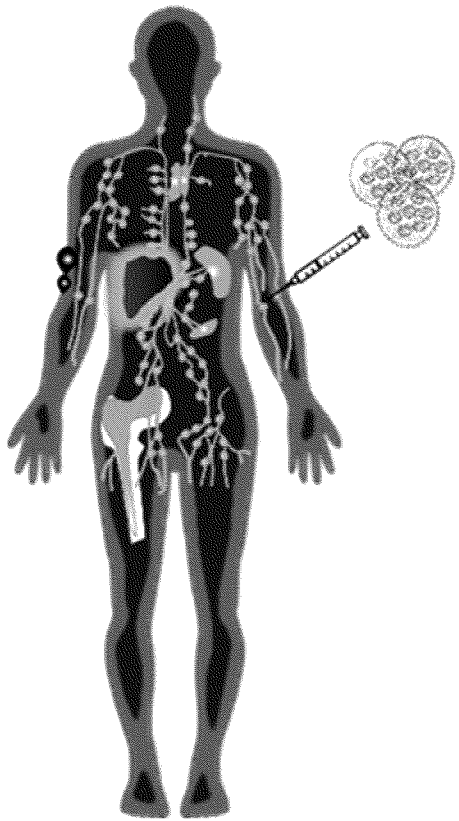

A
RiboMab® platform
Monospecific antibody IgG
Bispecific antibody bi-(scFv)2
Bispecific antibody Fab-(scFv)2
IVT mRNA(s)
Polypeptide-chain(s)
RiboMAB
5′ UTR
CDS 1
3′ UTR
CDS 2
CDS
Cap 1
A30L70
m1Ψ
Translation
Assembly, folding & secretion
Folding & secretion
IgG
CD3xTAA bi-(scFv)2
CD3 x (TAA)2 Fab-(scFv)2
Anti-TAA
Anti-CD3
Signal peptide

FIGURE 12


B
Antibody-encoding mRNA
(drug substance)
Lipids
mRNA/LNP
(drug product)
In vivo
translation
to drug
Cap 1
5' UTR
CDS 1
3' UTR
CDS 2
m1Ψ1
Helper lipid
PEG-lipid
Cationic lipid
60-120 nm
Antibody-
encoding
mRNA
IgG

C Treatment concept



(1) Intravenous injection

(2) LNP target site: liver

(3) Translation and systemic availability of active drug

FIGURE 12

FIGURE 13

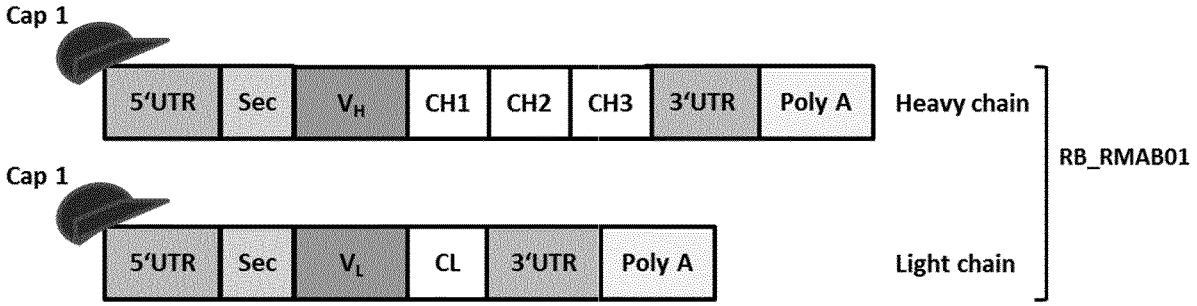


FIGURE 14

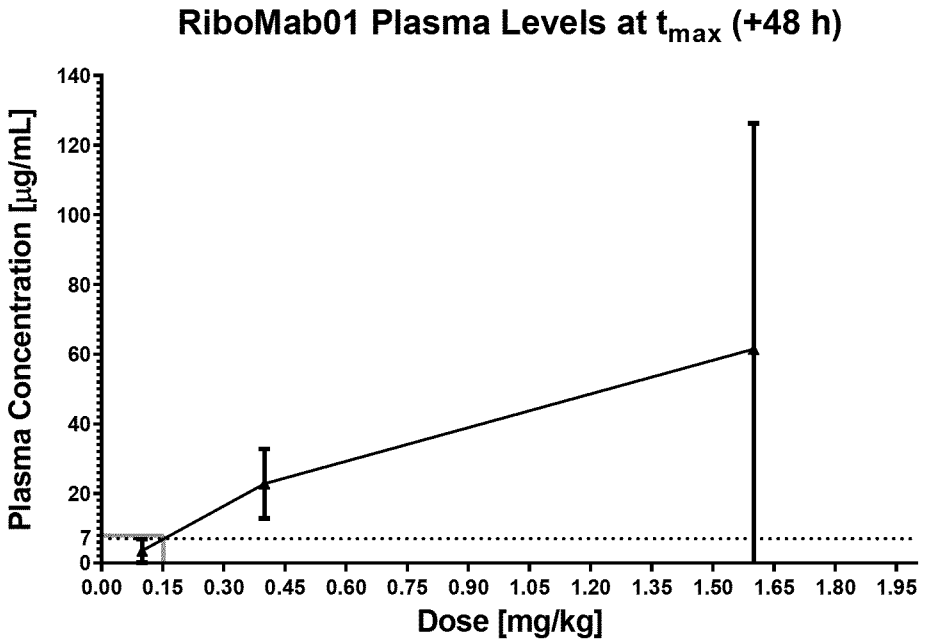
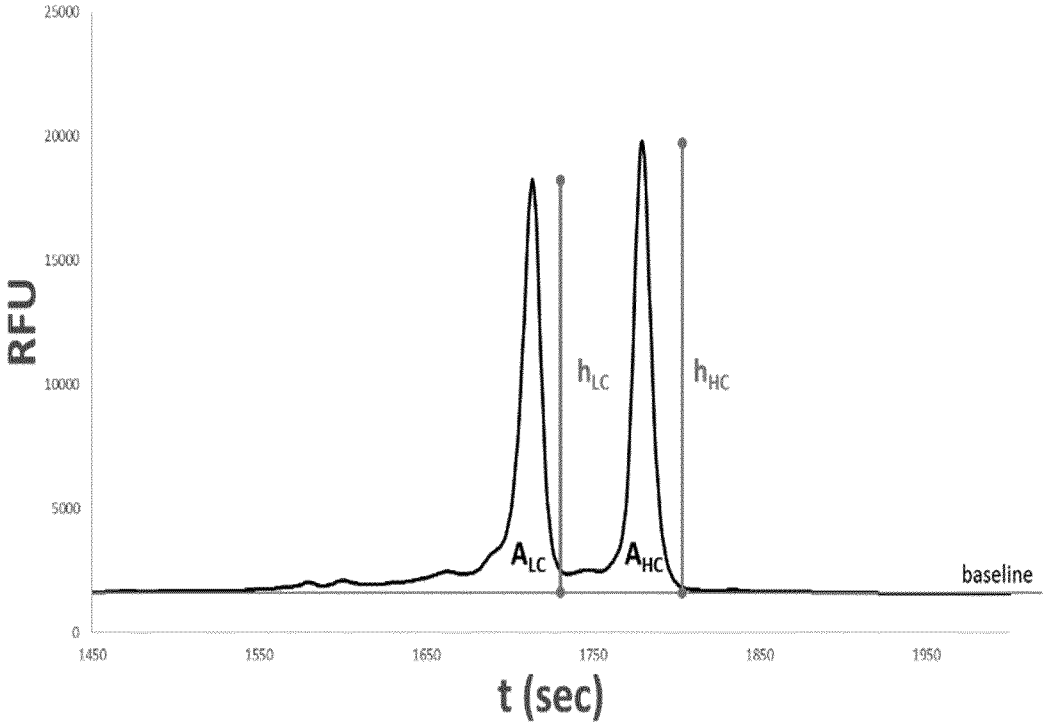


FIGURE 15


25000
20000
15000
10000
5000
0
RFU
1450
1550
1650
1750
1850
1950
t (sec)
h_{LC}
h_{HC}
A_{LC}
A_{HC}
baseline