A **NI-301.59F1-VH (variable heavy chain)**

```
FR1--------------------------CDR1-FR2-----------CDR2------------FR3-
EVQLVESGGGLVQPGGSLRLSCVASGFTFSNYWMSWVRQAPGKGLEWVANINQDSEKYYVDSVKGRFAI
----------------------------CDR3--------------FR4---------
SRDNSKNSLYLQMNSLRVEDTGVYYCARDRYCSGGRCSRGNNWFDPWGQGTLVTVSS
```

NI-301.59F1-VL (variable kappa light chain)

```
FR1--------------------CDR1-------FR2------------CDR2---FR3----------
EIVLTQSPATLSLSPGERATLSCRASQSVRSNLAWYQQKPGQAPRLLIYGASTRATDIPARFSGSGSGT
-------------------CDR3------FR4--------
EFTLTISSLQSEDFAVYYCQQYNNWPPYTFGQGTKVDIK
```

B **NI-301.35G11 -VH (variable heavy chain)**

```
FR1--------------------------CDR1-FR2-----------CDR2-------------FR3
EVQLVESGGGLVQPGGSLRLSCVASGFTFSSYAMSWVRQVPGKGLEWVSSISGSGDTTKYTDSVKGRFT
----------------------------CDR3-------FR4---------
ISRDNSKNTVFLQMSSLRAEDTALYYCVKDGSGRIDPFALWGQGTMVTVSS
```

NI-301.35G11-VL (variable kappa light chain)

```
FR1--------------------CDR1------------FR2------------CDR2---FR3-----
EIVMTQSPLSLPVTLGQPASISCRSSRSLVYSDGNIYLNWFQQRPGQSPRRLIYKVSNRDSGVPDRFSG
------------------------CDR3-----FR4--------
SGSDTDFTLRISRVEAEDVGVYYCMQGTHWPRTFGQGTKVEIK
```

C **NI-301.37F1-VH (variable heavy chain)**

```
FR1--------------------------CDR1-FR2-------------CDR2--------------
QVQLQESGPGLVKPSETLSLTCSVSGGSIISRSSYWGWIRQPPGKGLEWIGGIYHSGNTYDNPSLKSRL
------------------------------CDR3------FR4---------
TMSVDTSKNQFSLNLRSVTAADTAVYYCARIVPGGDAFDIWGQGTMVTVSS
```

NI-301.37F1-VL (variable kappa light chain)

```
FR1--------------------CDR1-------FR2------------CDR2---FR3----------
DIQMTQSPSSLSASVGDRVTIACRASQSVGTYLNWYQQKRGKAPKLLIFAASSLQSGVPSRFSGSGSGT
-------------------CDR3-----FR4--------
DFTLTISSLQPEDFATYYCQQSYSSPPTFGQGTKVEIK
```

Fig. 1

D **NI-301.2F5-VH (variable heavy chain)**

```
FR1--------------------------CDR1-FR2-----------CDR2-------------FR3
EVQLVESGGGVVRSRRSLRLSCATSGFTFSNYAMHWVRQAPGKGLEWVAIISYDGNNKYYADSVRGRFT

----------------------------CDR3--------FR4---------
VSRDNSKNTFYLQMNSLRIEDTAVYFCARGSGRAARHWFDPWGQGTLVTVSS
```

NI-301.2F5-VL (variable lambda light chain)

```
FR1-------------------CDR1----------FR2------------CDR2---FR3--------
QSALTQPASVSGSPGQSITISCTGTSSDVGGYNYVSWYQQYPGKAPKVMIFDVFNRPSGVSNRFSGSKS

---------------------CDR3--------FR4--------
GNTASLTISGLQAEDEADYYCSSYTSSVTPHWVFGGGTKLTVL
```

E **NI-301.28B3 -VH (variable heavy chain)**

```
FR1--------------------------CDR1---FR2-----------CDR2------------FR
QLQLQESGPGLVKPSETLSLTCTVSGGSITSSNFYWGWIRQPPGKGLEWIGAIYSSGNTYYNPSLKSRV

3----------------------------CDR3-------------FR4---------
TISVDTSKKKFSLKLSSVTAADTAVYYCARHSCSSASCYPPGFWFDPWGQGTLVTVSS
```

NI-301.28B3 -VL (variable kappa light chain)

```
FR1--------------------CDR1-------FR2------------CDR2---FR3----------
EIVMTQSPATLSASPGERATLSCRASQTVSYNLAWYQQKPGQAPRLLIYGASTRATGIPGRFSGSGSGT

-------------------CDR3------FR4--------
EFTLTISSLQSEDFAVYYCQQYNNWPPWTFGQGTKVEIK
```

F **NI-301.119C12-VH (variable heavy chain)**

```
FR1--------------------------CDR1---FR2-----------CDR2-------------
QVQLQESGPRLVKPSQTLSLTCTVSGGSISSGVYYWSWIRQHPGKGLEWIGYISNTGNTYYNPSLKSRV

----------------------------CDR3-------------FR4---------
TISIDTSKNQFSLNLRSVTAADTADYFCAREYCSGGNCYSRFYYYMDVWGKGTTVTVSS
```

NI-301.119C12-VL (variable lambda light chain)

```
FR1-------------------CDR1----------FR2------------CDR2---FR3--------
QSVLTQPPSVSGAPGQRVTISCTGSSSNIGAGYGVHWYQQLSGTPPKLLIYGDNNRPSGVPDRFSGSKS

---------------------CDR3--------FR4--------
GTSASLAITGLQAEDEAHYYCQSYDTTLSGSRVFGGGTKLTVL
```

Fig. 1 (continued)

G **NI-301.5D8-VH (variable heavy chain)**

```
FR1--------------------------CDR1-FR2-----------CDR2------------FR3-
QVQLQQWGAGRLKPSETLSLTCAVYGGSFSAYYWNWIRQAPGKGLEWIGEVSHGGSSNYSPSLRGRVAI

----------------------------CDR3---------FR4---------
SLDTSKSQFSLRLNSVTAADTAVYYCARGSPVVLPGARFDPWGQGTLVTVSS
```

NI-301.5D8-VL (variable lambda light chain)

```
FR1--------------------------CDR1--FR2------------CDR2---FR3--------
QSALTQPASVSGFPGQSITISCTGTSSDVGSYNLVSWYQQHPGKAPKLLIYEVNKRPSGVSTRFSGSKS

---------------------CDR3-----FR4--------
GNTASLTISGLQTEDEADYYCCSYAGSTKVFGIGTKVTVL
```

H **NI-301.9D5-VH (variable heavy chain)**

```
FR1--------------------------CDR1---FR2-----------CDR2------------FR
QVQLQESGPGLVKPSETLSLTCIVSGVSIRSGGYYWSWIRQHPGKGLEWVGFIYYTGNTYYNPSLKSRA

3----------------------------CDR3----------FR4---------
TISVDTSKNQFSLRLTAVTAADTAVYYCARDCSGGSCPESYFDSWGRGTLVTVSS
```

NI-301.9D5 -VL (variable kappa light chain)

```
FR1--------------------CDR1-------FR2------------CDR2---FR3----------
EIVMTQSPATLSLSPGERATLSCRASQSVRSFLAWYQQKSGQAPRLLIYDASKRATGIPARFSDSGSGT

--------------------CDR3------FR4--------
DFTLTISRLETEDSAVYYCQQRTNWPPHLTFGGGTKVEIK
```

I **NI-301.104F5-VH (variable heavy chain)**

```
FR1--------------------------CDR1-FR2-----------CDR2-------------FR3
QVQLVESGGGVVQPERSLRLSCAASGFTFRSYGMHWVRQAPGKGLEWVAVIWFDGSNKYYADSVKGRFT

----------------------------CDR3------FR4---------
VSRDNSKNTLYLQMNSLRAEDTAVYYCARDGIAATYADYWGQGTLVTVSS
```

NI-301.104F5-VL (variable kappa light chain)

```
FR1--------------------CDR1-------FR2------------CDR2---FR3----------
EIVLTQSPATLSLSPGERATLSCRASQSVRSYLAWYQQKPGQAPRLLIYGASNRATGIPARFSGSGSGT

-------------------CDR3-----FR4--------
DFTLTISSLEPEDFAVYYCQQRSNWPITFGQGTRLEIK
```

Fig. 1 (continued)

J **NI-301.21F10-VH (variable heavy chain)**

```
FR1--------------------------CDR1----FR2-----------CDR2-------------
QVQLVESGGGLVQPGGSLRLSCAVSGFTLSSLSSYYMSWVRQAPGKGLEWVATINPGGSEKSYVDSVKG

FR3----------------------------CDR3---------FR4---------
RFTVSRDNARSSVYLQMDSLTVEDTAIYYCARPRYCTSGGCYFDNWGQGTLVTVSS
```

NI-301.21F10-VL (variable lambda light chain)

```
FR1-------------------CDR1----------FR2------------CDR2---FR3--------
QSALTQPRSVSGSPGQSVTISCTATNSDVGDYKSVSWYQQHPGKAPKLMIYDVGRRPSGVPDRFSGSKS

---------------------CDR3-----FR4--------
DNTAFLTISGLQTEDEADYFCCIYVGRSSVFGGGTKLTVL
```

K **NI-301.9G12-VH (variable heavy chain)**

```
FR1--------------------------CDR1--FR2-----------CDR2------------FR3
QVQLQESGPGLVKPSETLSLTCAVSGFSISSGYYWGWIRQPPGTGLEWIGSMYHSGRTYYNPSLKSRVT

----------------------------CDR3-----------FR4---------
ISVDTSKNQLSLKLSSVTAADTAVYYCARGFDTSGSHRPLSTDYWGQGTLVTVSS
```

NI-301.9G12-VL (variable lambda light chain)

```
FR1-------------------CDR1---------FR2------------CDR2---FR3---------
QSVLTQPPSVSAAPGQKVTISCSGSSSNIGNNYVSWYQQLPGTAPKLLIYDNNKRPSGIPDRISGSKSG

---------------------CDR3-------FR4--------
TSATLGITGLQTGDEADYYCGTWDSSLSAYVFGTGTKVTVL
```

L **NI-301.12D3-VH (variable heavy chain)**

```
FR1--------------------------CDR1-FR2-----------CDR2-------------FR3
EVQLVETGGGVVQPGRSLRLSCVASGFTFRNYGMHWVRRAPGRGLEWVAVIWSDGSDKYYADSVEGRFT

----------------------------CDR3------FR4--------
ISRDNSKNTVFLQMNSLRADDTAVYFCAREPSSTWAFDYWGQGTLVTVSS
```

NI-301.12D3-VL (variable lambda light chain)

```
FR1-------------------CDR1----------FR2------------CDR2---FR3--------
QSALTQPASVSGSPGQSITISCTGTSSDVGGYNLVSWYQQHPGKAPKLMIYEDIKGPSGVSNRFSGSKS

---------------------CDR3------FR4--------
GNTASLTISGLQAEDEADYFCCSYAGTGTLVFGGGTKLTVL
```

Fig. 1 (continued)

M **NI-301.37F1-PIMC VH (variable heavy chain)**

FR1----------CDR1----FR2----------CDR2----------
QLQLQESGPGLVKPSETLSLTCSVSGGSIISRSSYWGWIRQPPGKGLEWIGGIYHSGNTYDNPSLKSRL

FR3----------CDR3---------FR4---------
TMSVDTSKNQFSLNLRSVTAADTAVYYCARIVPGGDAFDIWGQGTMVTVSS

N **NI-301.44E4 VH (variable heavy chain)**

FR1----------CDR1--FR2----------CDR2----------FR3
EVQLVESGGGLVQPGGSLRLSCAASGFTFSSYAMIWVRQAPGKGLEWVSGISGSGSTTYYADSVKGRFA

----------CDR3----------FR4---------
ISRDKSKNTLSLQMNSLRAEDTAVYYCAKGAWEIPTYFDNWGQGTLVTVSS

NI-301.44E4 VK (variable lambda light chain)

FR1----------CDR1---------FR2----------CDR2---FR3---------
EIVLTQSPATLSVSPGERATLSCRASQSIRNNLAWYQQKPGQAPRLLIYGASTRATGIPARFSGTGSGT

----------CDR3-------FR4--------
EFTLIVSSLQSEDFAVYYCQQYNNWPPTWTFGQGTKVEIK

O **NI-301.18C4 VH (variable heavy chain)**

FR1----------CDR1--FR2----------CDR2----------FR3
EVQLVESGGTLVQPGGSLRLSCAASGFTFNIYAMTWVRLSPVRGLEWVSTITSGGVSIYYADSIKGRFT

----------CDR3----------FR4---------
VSRDNAKNMVFLQLDNLTVDDTAIYYCGKDGNCDETSCYLRGMDVWGQGTTVTVSS

NI-301.18C4 VL (variable lambda light chain)

FR1----------CDR1---------FR2----------CDR2---FR3---------
QSVLTQPPSVSAAPGQKVTISCSGSRSDIGSKLVSWYQVIPGRAPRLVIFDTYKRPSGVPARFSASKSG

----------CDR3-------FR4--------
TSATLDIAGLQPGDEAEYFCGSWGNSENFYYVFGSGTRVTVL

Fig. 1 (continued)

P **NI-301.11A10-VH (variable heavy chain)** (PIMC by default)

```
FR1--------------------------CDR1-FR2-------------CDR2--------------
QLQLQESGPGLVKPSETLSLTCTVSGGSISSRSYYWGWMRQPPGKGLEWIGSIYYSGSTLYNPSLKSRV

FR3--------------------------CDR3----FR4--------
TMSIVTSRNQFSLKLSSVTAADTAVYYCTRMGEGGRDYWGQGTLVTVSS
```

NI-301.11A10- VK (variable kappa light chain) (PIMC by default)

```
FR1--------------------CDR1-------FR2------------CDR2---FR3----------
DIQMTQSPSTLSASVGDRVTITCRASQSISSWLAWYQQKPGKAPKVLIYDASSLERGVPSRFSGSGSGT

-------------------CDR3-----FR4-------
EFTLTISSLQPDDSATYYCQHYNGYSRTFGRGTKVEIK
```

Q **NI-301.3C9-VH (variable heavy chain)** (PIMC by default)

```
FR1--------------------------CDR1---FR2-----------CDR2------------FR
QVQLQESGPGLVKSSQTLSLTCTVSGASFTRGDFYWSWIRQVPGKGLEWIGYIYSTGDVYYNPSLKSRA

3----------------------------CDR3----------FR4--------
NISVDTPKKQFFLKLTSLTAADTAVYFCAREGQYCSGGSCYPEYWGQGTLVTVSS
```

NI-301.3C9-VL (variable lambda light chain)

```
FR1-------------------CDR1-------FR2------------CDR2---FR3----------
SYELTQPPSVSVSPGQTATITCSGDNLGHKFTCWYQQKPGQSPVLVIYQDHKRPSGIPERFSGSNSGDT

------------------CDR3-----FR4-------
ATLTISGTQAMDEAEYYCQAWAFPYVVFGGGTKLTVL
```

R **NI-301.14D8 -H (variable heavy chain)**

```
FR1--------------------------CDR1-FR2-----------CDR2-------------FR3
EVQLVETGGRLVQPGGSVRLSCIASGFPFRNYWMSWVRQPPGKGLEWVANIKEDGSDRYYVDSVKGRFT

---------------------------CDR3----------FR4--------
IFRDNAKNFLSLQMNRLRAEDTAVYFCARIVGVIPSADPYYLDSWGQGTLVTVSS
```

NI-301.14D8-VL (variable lambda light chain) (PIMC by default)

```
FR1-------------------CDR1----------FR2------------CDR2---FR3--------
QSALTQPASVSGFAGQSVTISCTGTSLNIGTYNLISWYQQHPGRAPRLIIFEGNRRPPGISNRFSASKS

--------------------CDR3------FR4-------
GNTASLTVSGLLAGDEADYYCCSFAGRVSLVFGGGTKLTVL
```

Fig. 1 (continued)

S **NI-301.9X4-VH (variable heavy chain)** (PIMC by default)

```
FR1--------------------------CDR1-FR2----------CDR2----------------
QVQLQESGPGLVKPSETLSLTCSVSAGSISSHYWNWIRQPPGKGLEWIGSIYHSGSTNYNPSLKSRVTI

FR3------------------------CDR3----FR4--------
SVDTSKNHVSLRLTSVTAADTAVYYCARDYYYYMDVWGKGTTVTVSS
```

NI-301.9X4-VL (variable lambda light chain) (PIMC by default)

```
FR1-------------------CDR1-------FR2------------CDR2---FR3-----------
SYELTQPPSVSVSPGQTARITCSGDALPDKYAYWYQQKPGQAPMLVIYKDSERPSGIPERFSGSSLGTT

------------------CDR3-------FR4-------
VMLTISGVQAEDEADYYCKSADSSGTYWVFGGGTKLTVL
```

T **NI-301.14C3-VH (variable heavy chain)** (PIMC by default)

```
FR1--------------------------CDR1-FR2----------CDR2------------FR3-
EVQLVETGGGLIQPGGSLRLSCAASGFTVSSHYMSWVRQAPGKGLEWVSIIYSGGGTYYADSVKGRFTI

----------------------------CDR3---------FR4--------
SRDNSKNTLYLQMNSLRAEDTAVYYCAKIYRSGNTGYSYDYWGQGTLVTVSS
```

NI-301.14C3-VL (variable lambda light chain)

```
FR1-------------------CDR1-------FR2------------CDR2---FR3-----------
SYELTQPPSVSVSPGQTASITCSGDKLGSKYACWYQQKPGQSPVLVIYEDKKRPSGIPERFSGSNSGNT

------------------CDR3-------FR4-------
ATLTISGTQAMDEADYFCQAWDSSTSHVVFGGGTRLTVL
```

Fig. 1 (continued)

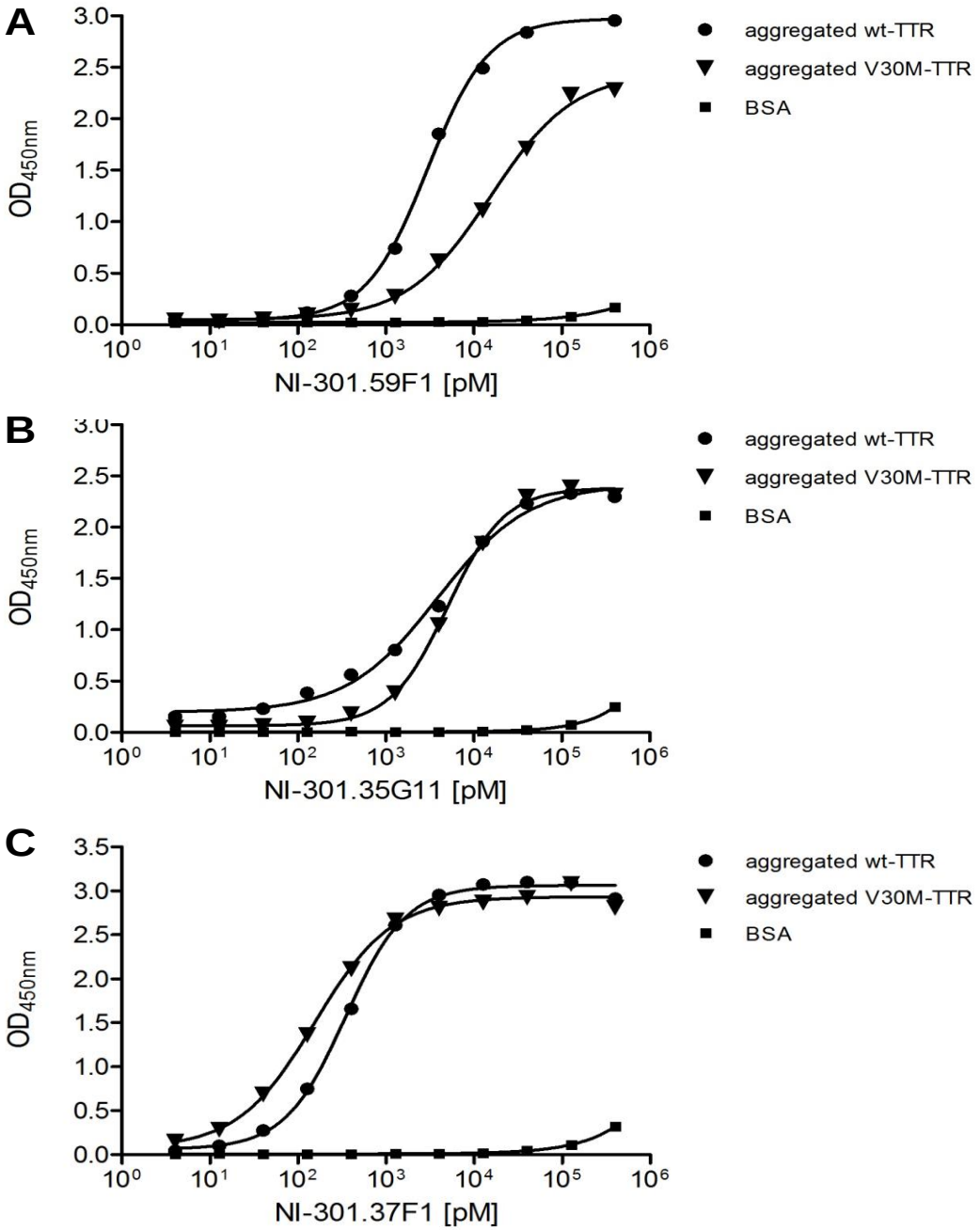
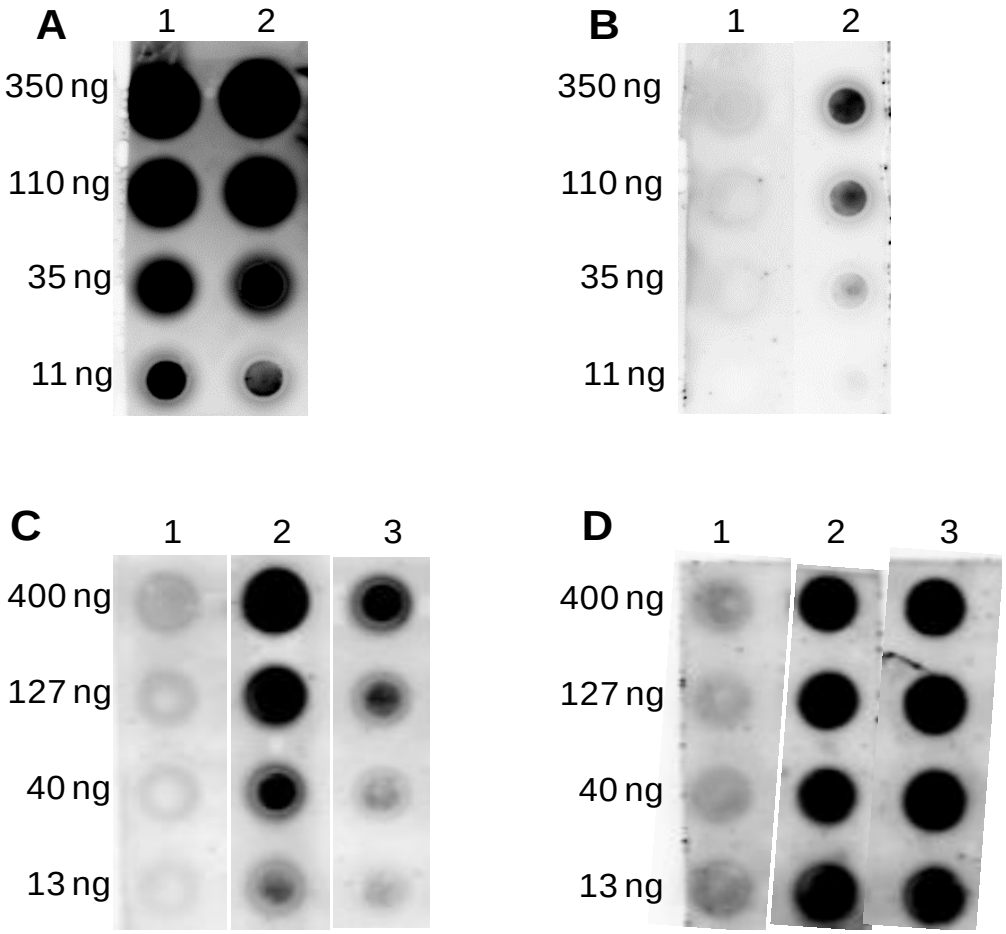
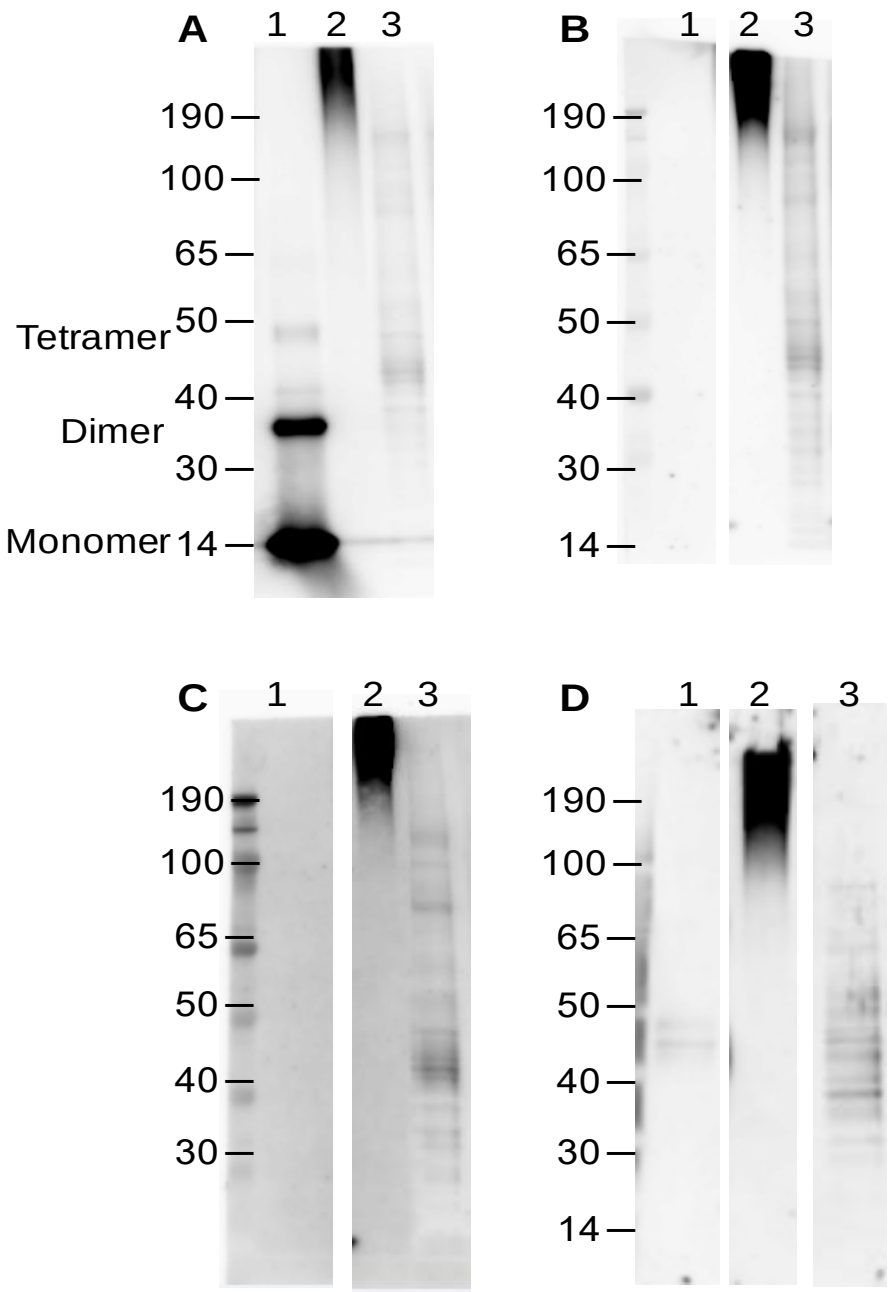

A
B
C
aggregated wt-TTR
aggregated V30M-TTR
BSA
OD450nm
NI-301.59F1 [pM]
NI-301.35G11 [pM]
NI-301.37F1 [pM]

Fig. 2



A: Dako 150 ng/ml
B: 59F1 50 nM
C: 35G11 50 nM
D: 37F1 50 nM

Fig. 3



A: Dako 150 ng/ml
B: 59F1 50 nM
C: 35G11 50 nM
D: 37F1 50 nM

Fig. 4

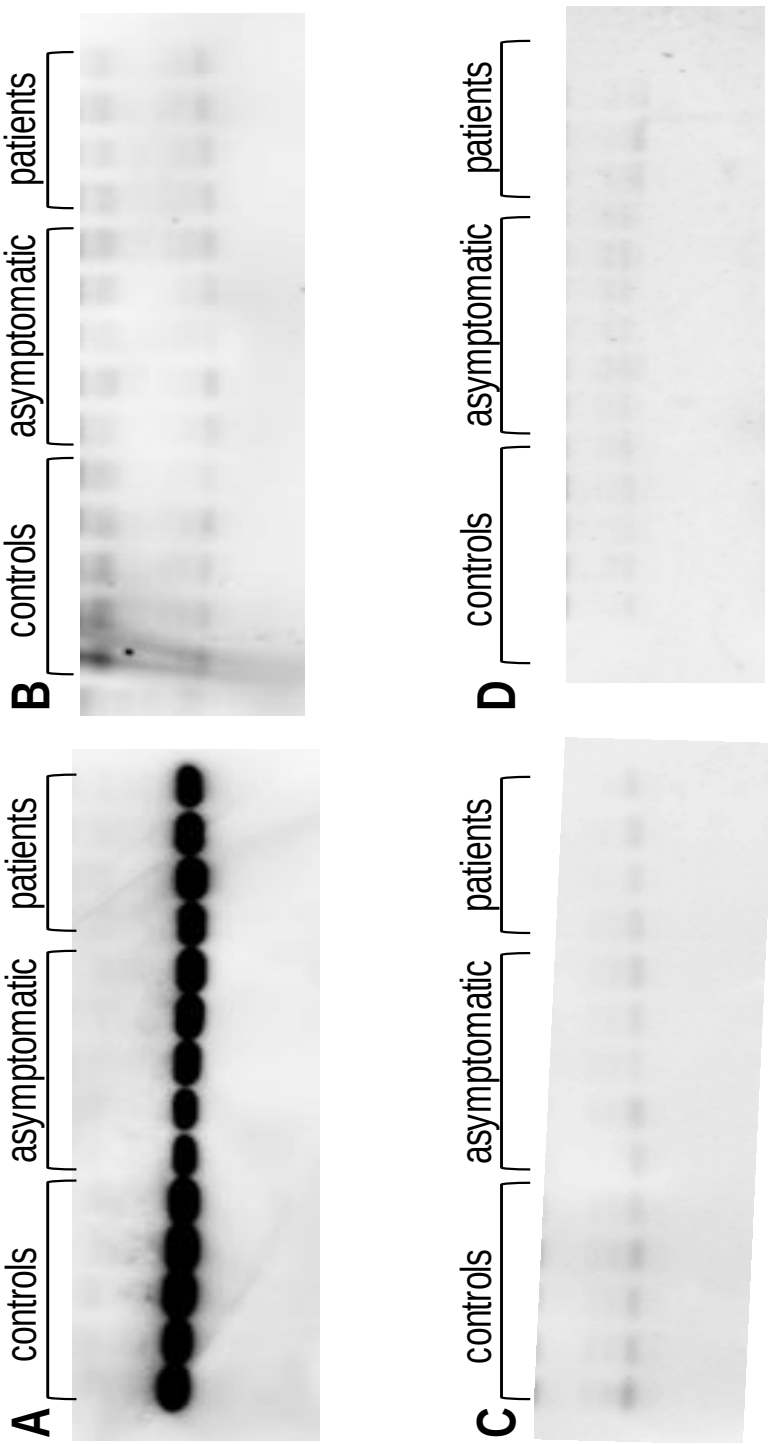

A
controls
asymptomatic
patients
B
controls
asymptomatic
patients
C
controls
asymptomatic
patients
D
controls
asymptomatic
patients

Fig. 5

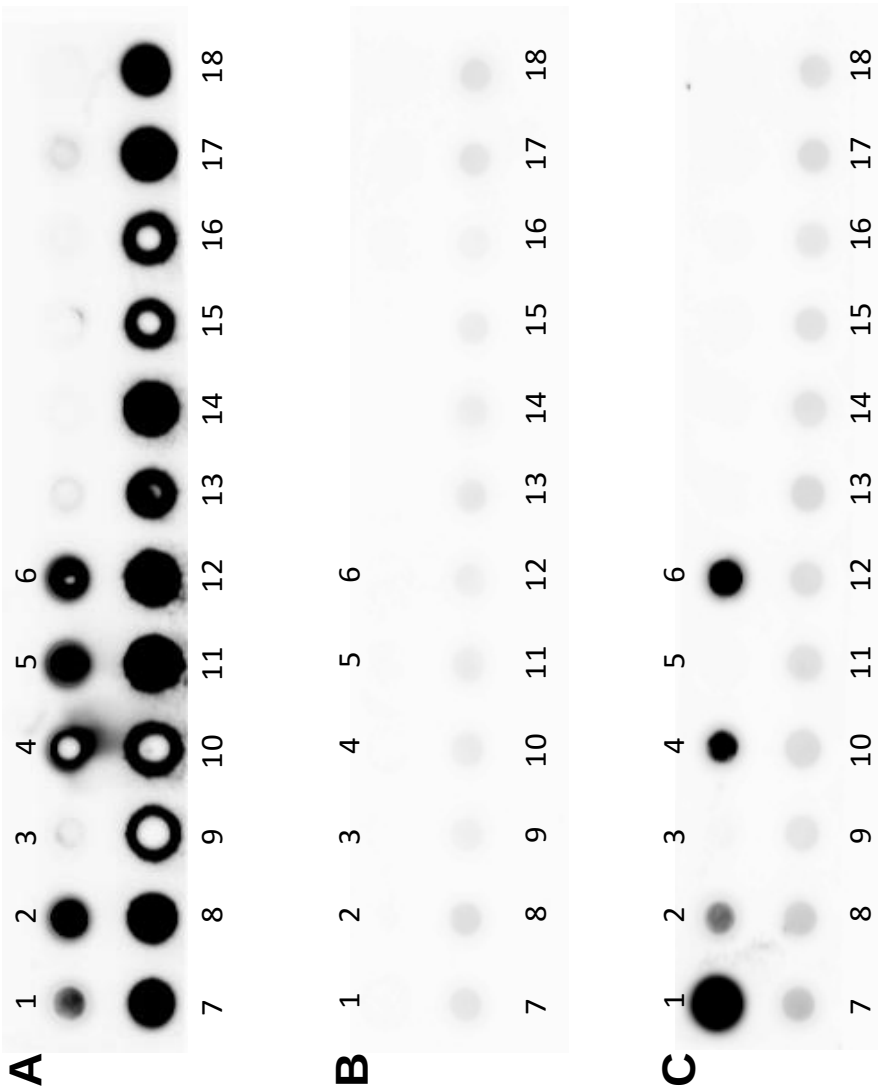

A
Dako
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
B
Anti-mouse IgG2a
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
C
mur35G11
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

Fig. 6

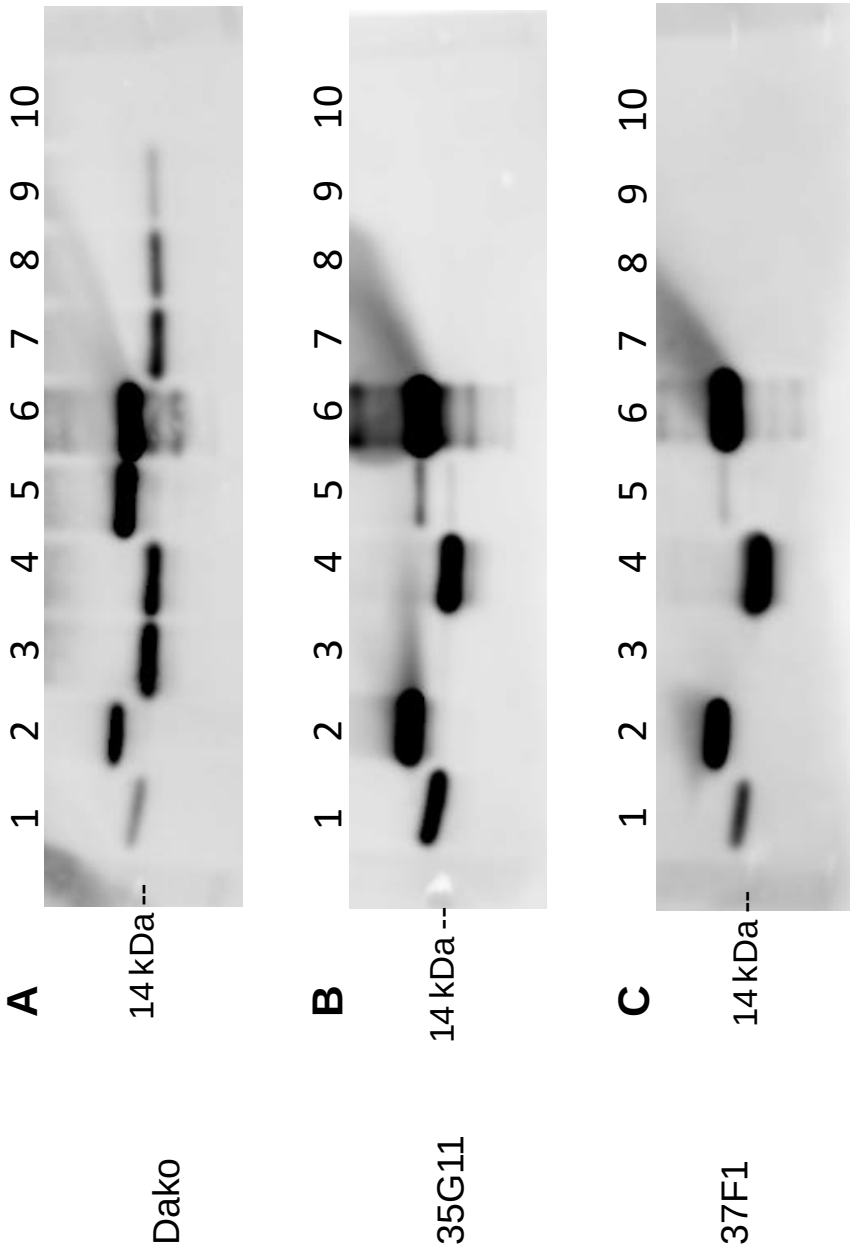

A
14 kDa --
1 2 3 4 5 6 7 8 9 10
Dako
B
14 kDa --
1 2 3 4 5 6 7 8 9 10
35G11
C
14 kDa --
1 2 3 4 5 6 7 8 9 10
37F1

Fig. 7

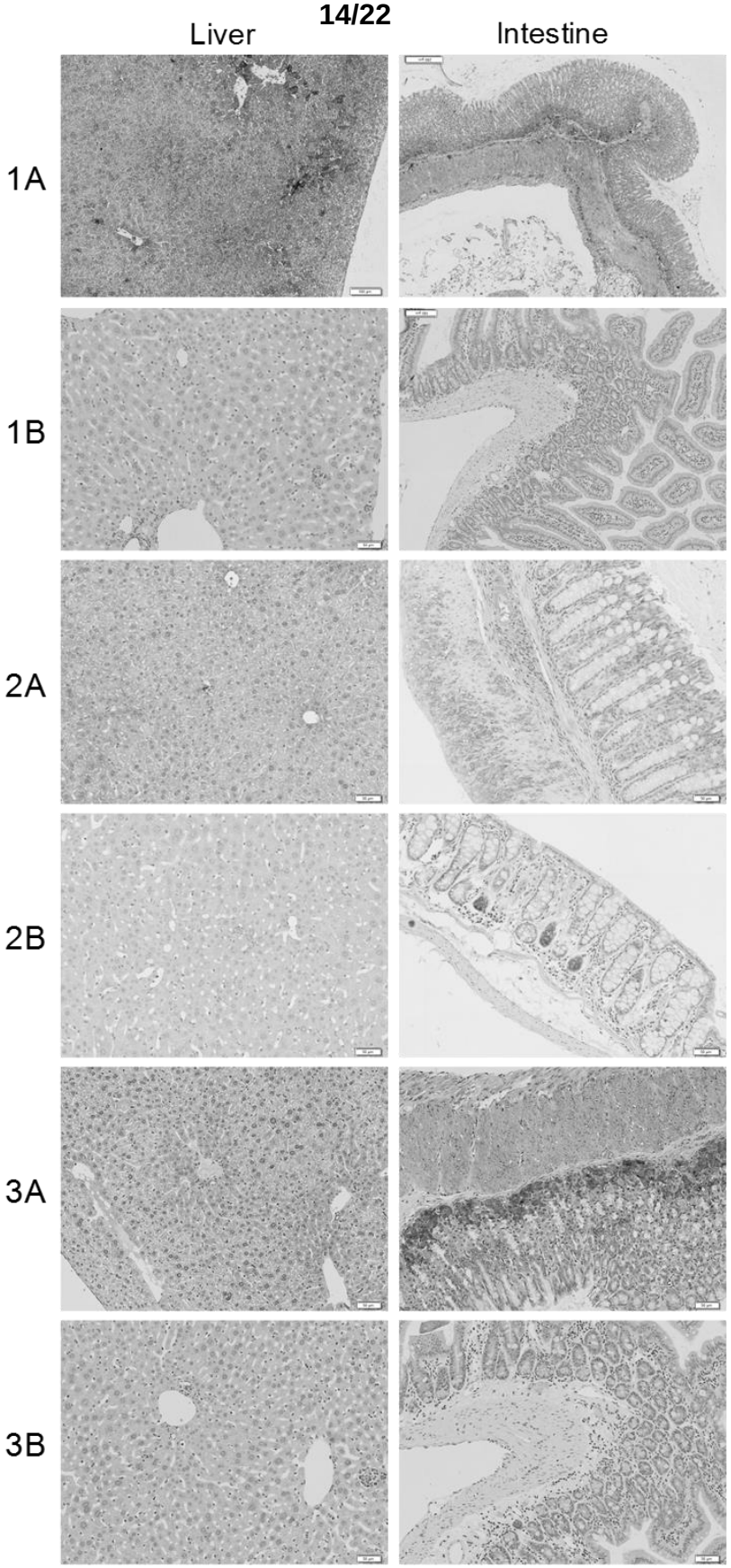


Fig. 8

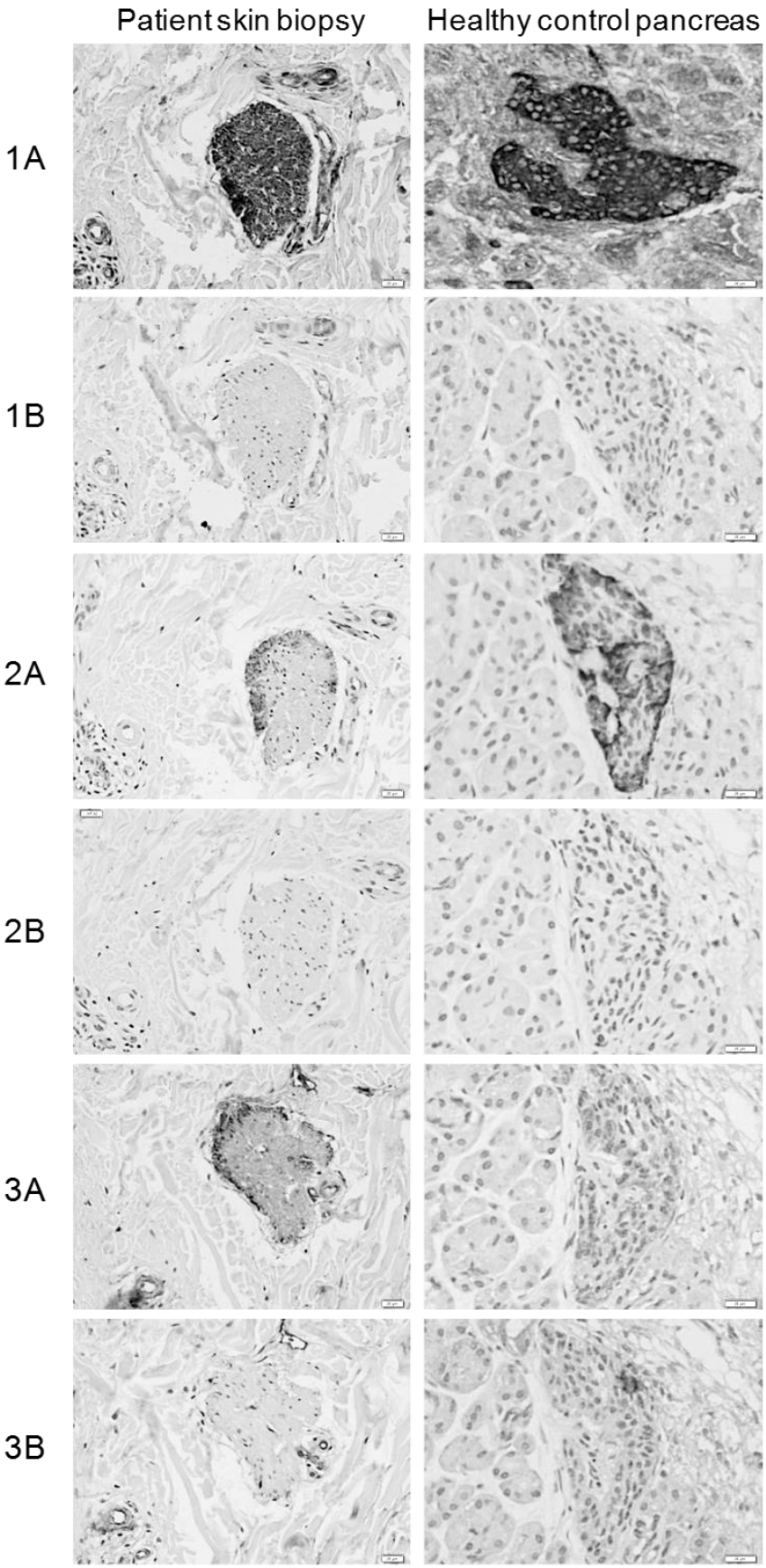
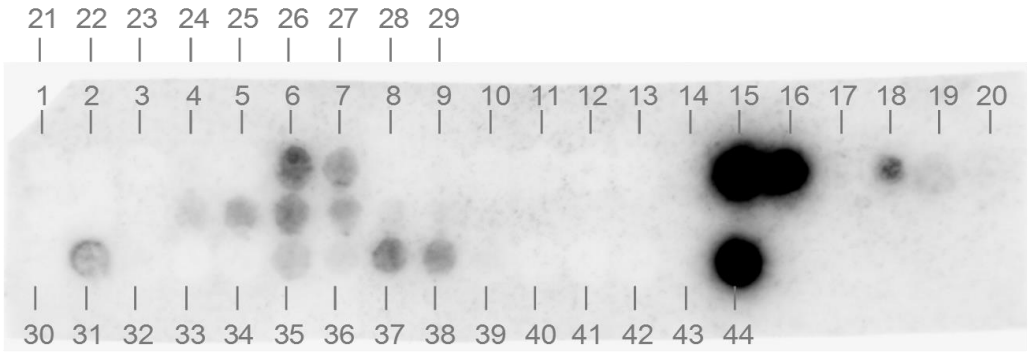
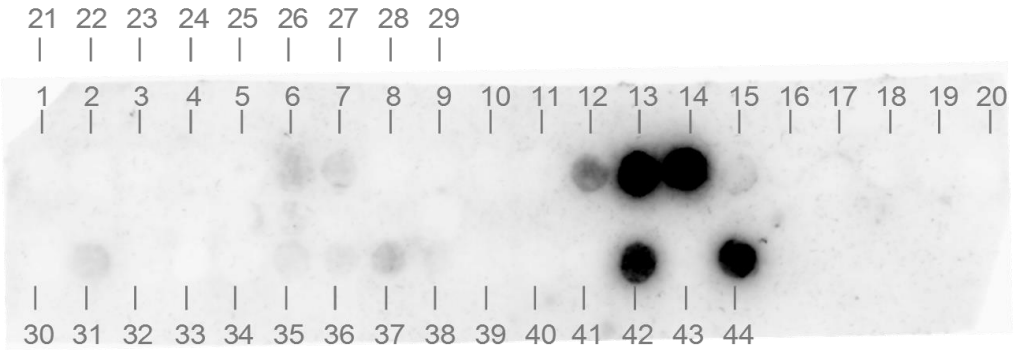

Patient skin biopsy
Healthy control pancreas
1A
1B
2A
2B
3A
3B

Fig. 9

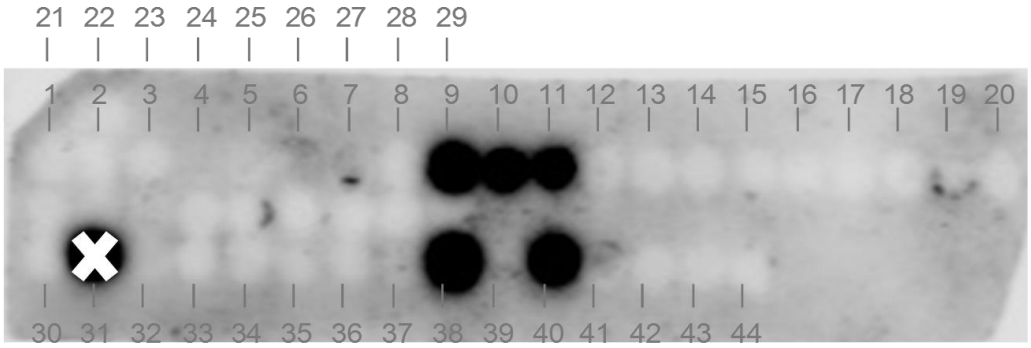
A



B



C

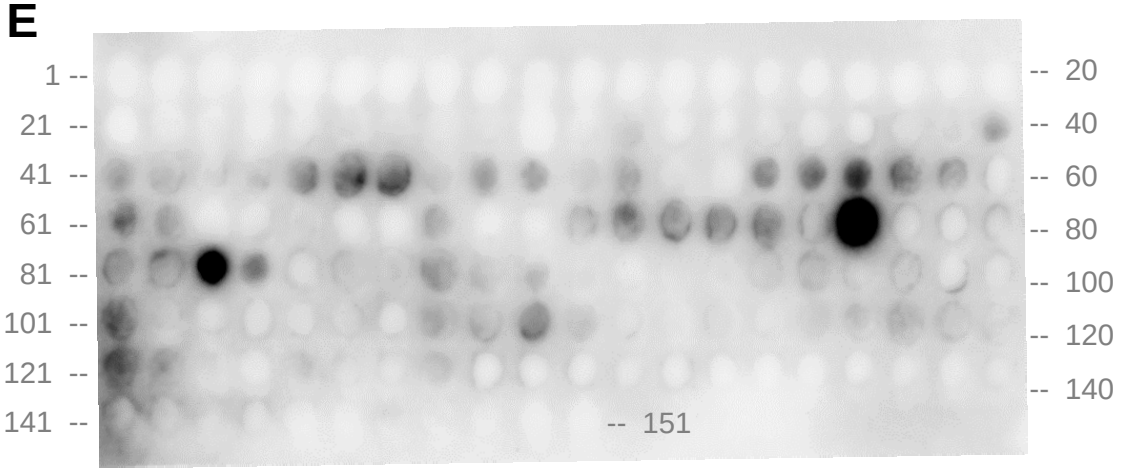


D

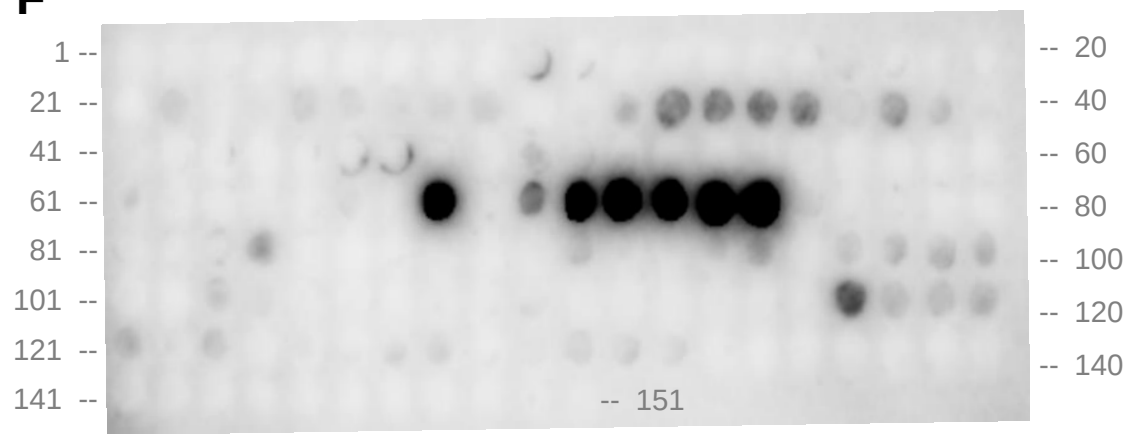
Antibody	Binding epitope
NI-301.59F1	61-EEEFVEGIY-69
NI-301.35G11	53-GELHGLTTEEE-63
NI-301.37F1	41-WEPFA-45

Fig. 10

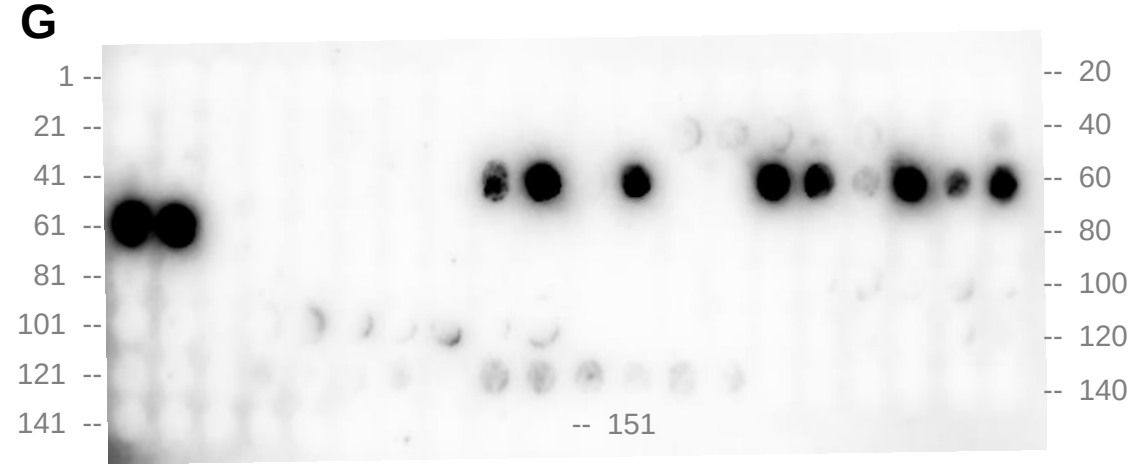
E



F



G



H

Antibody	Binding epitope
NI-301.59F1	61-EEFXEGIY-68
NI-301.35G11	54-ELXGLTXE-61
NI-301.37F1	41-WEPFA-45

Fig. 10 (continued)

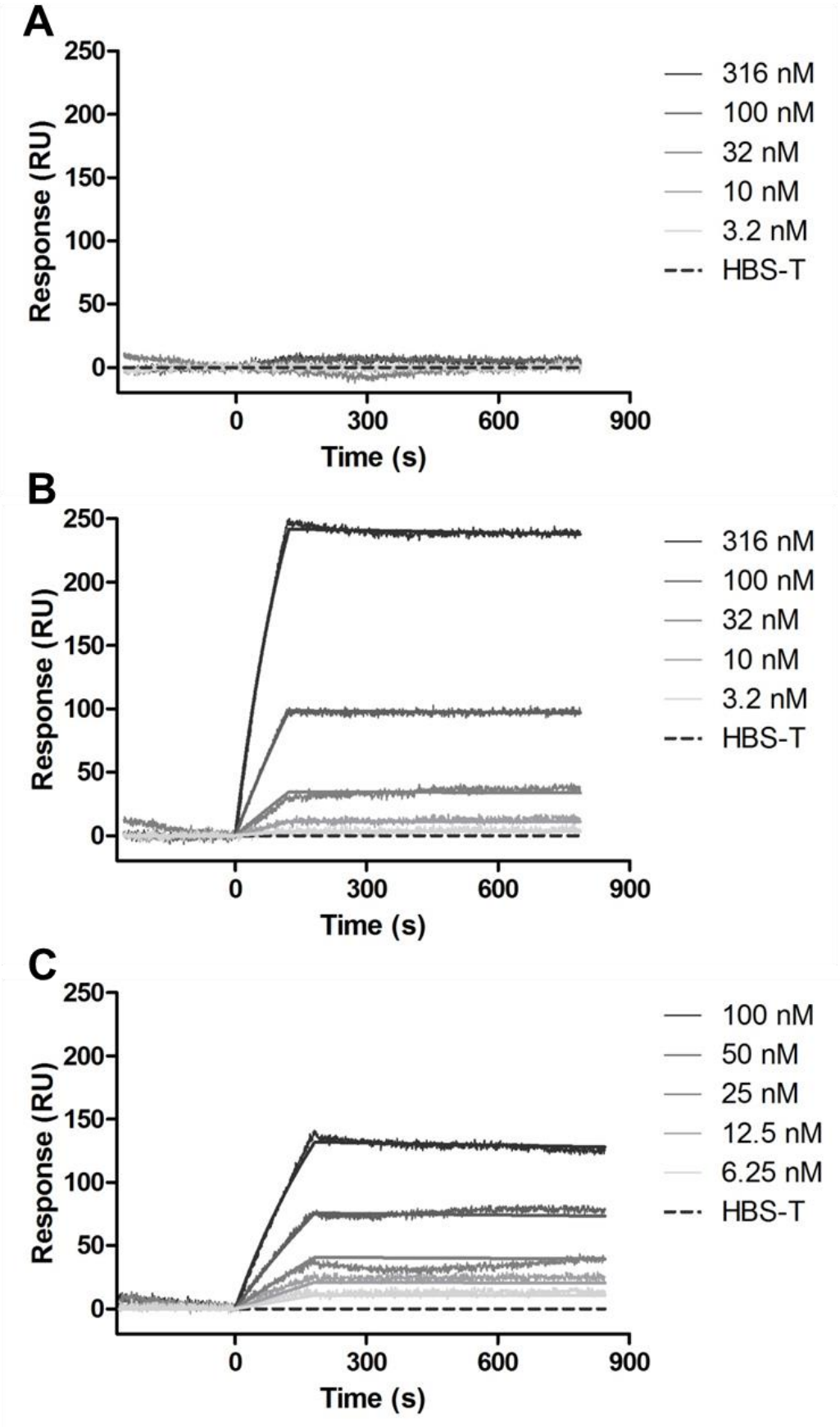

A
Response (RU)
250
200
150
100
50
0
0
300
600
900
Time (s)
316 nM
100 nM
32 nM
10 nM
3.2 nM
HBS-T
B
Response (RU)
250
200
150
100
50
0
0
300
600
900
Time (s)
316 nM
100 nM
32 nM
10 nM
3.2 nM
HBS-T
C
Response (RU)
250
200
150
100
50
0
0
300
600
900
Time (s)
100 nM
50 nM
25 nM
12.5 nM
6.25 nM
HBS-T

Fig. 11

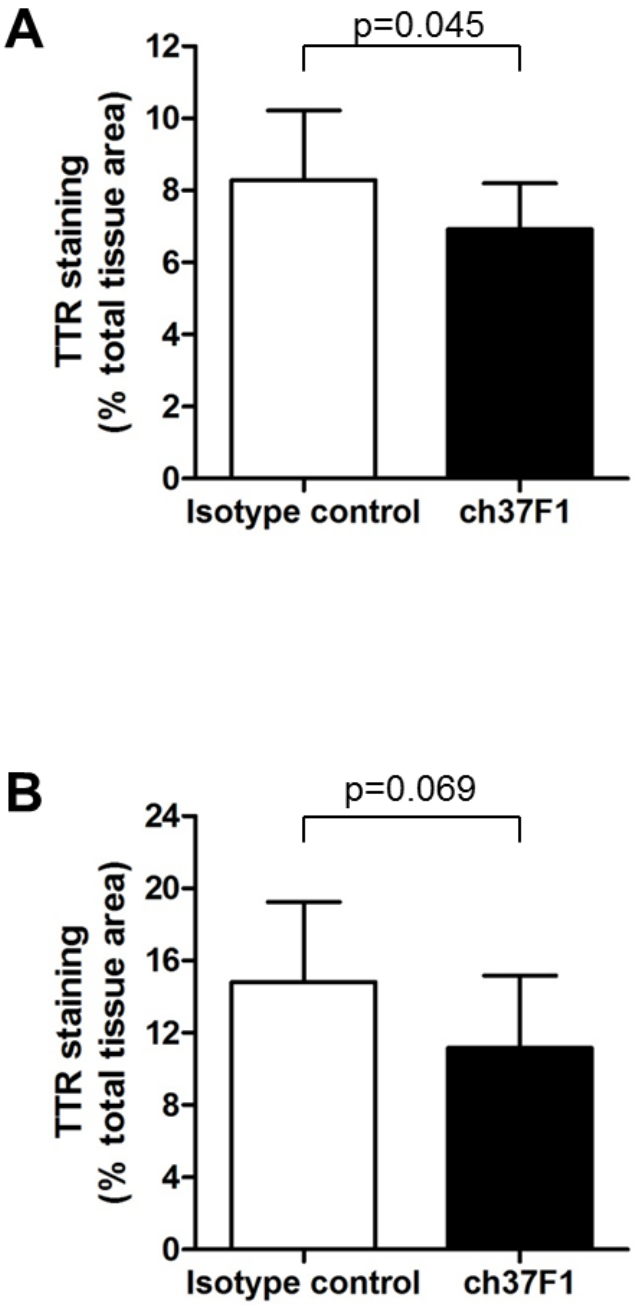

A
p=0.045
TTR staining
(% total tissue area)
12
10
8
6
4
2
0
Isotype control
ch37F1
B
p=0.069
TTR staining
(% total tissue area)
24
20
16
12
8
4
0
Isotype control
ch37F1

Fig. 12

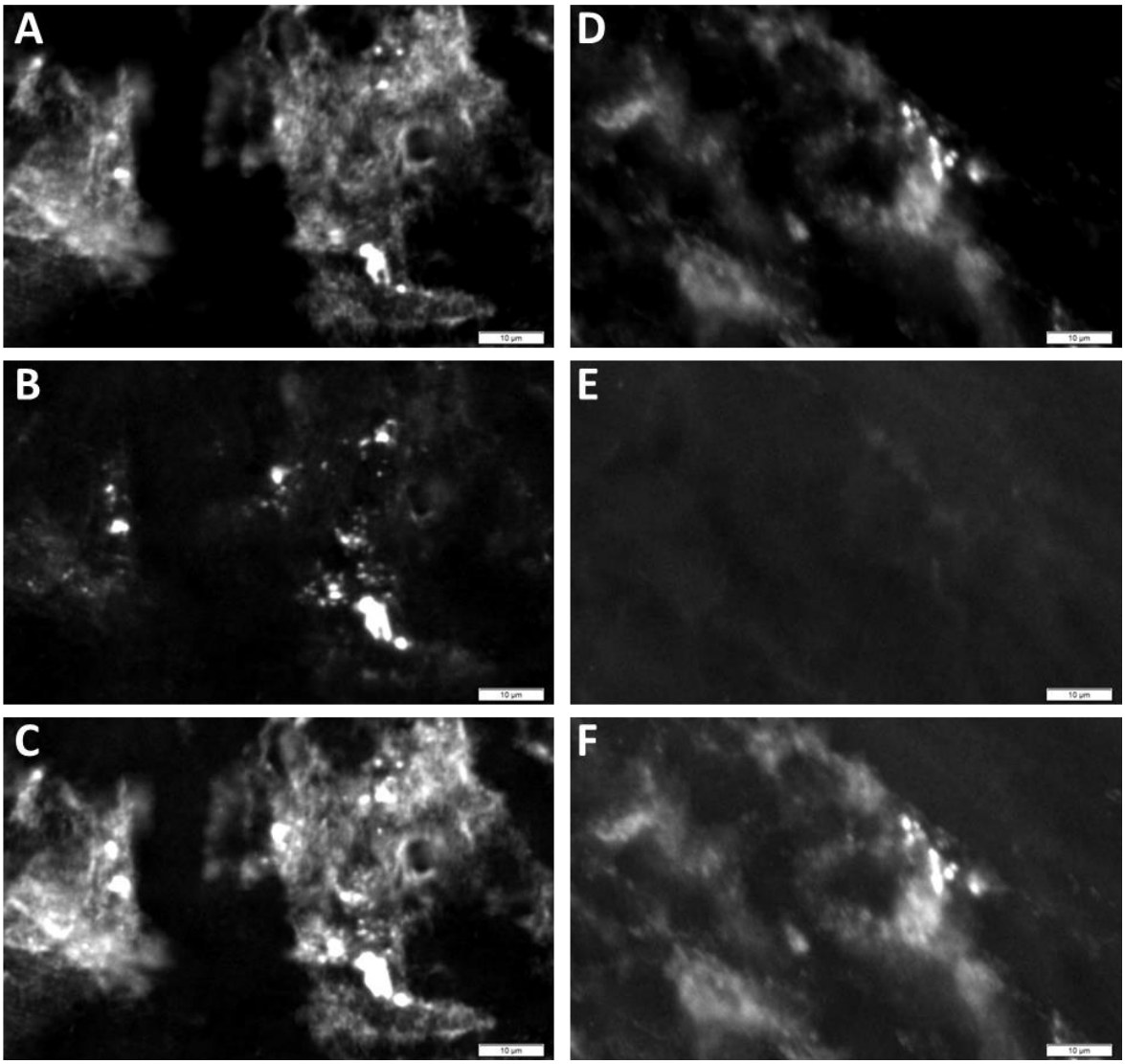


Fig. 13

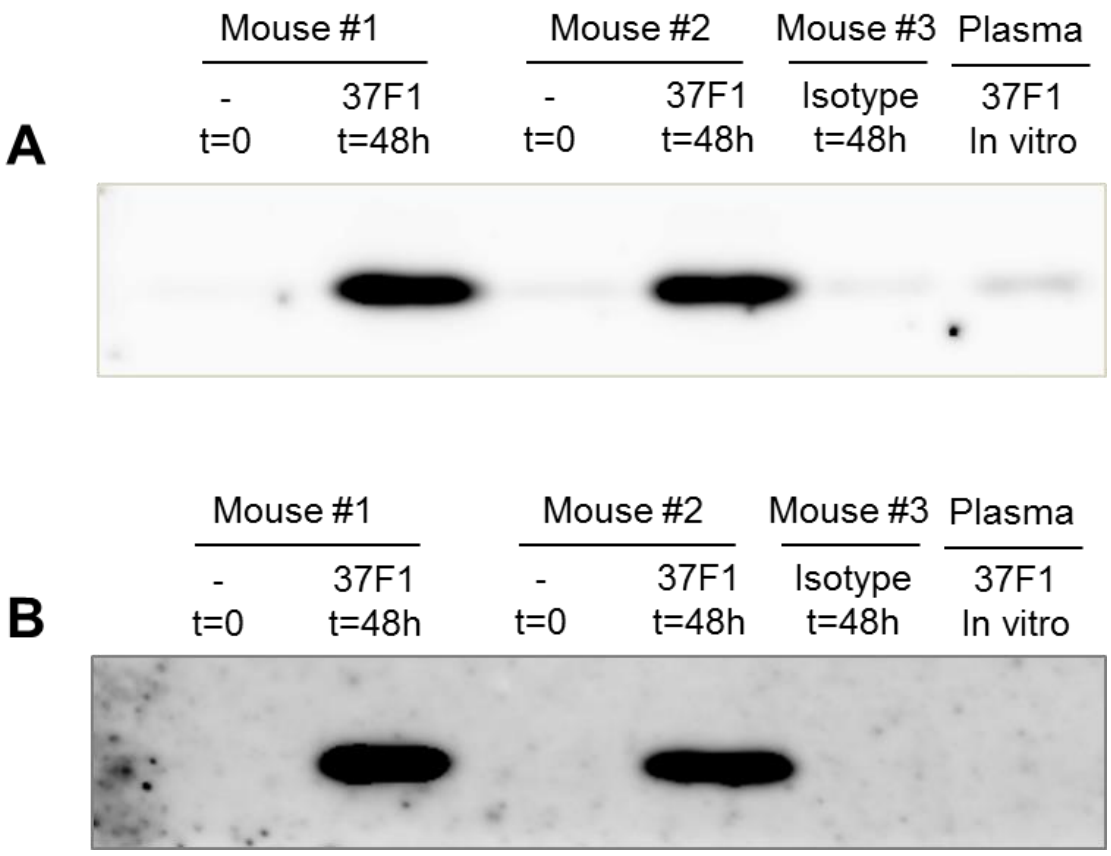

A
Mouse #1
Mouse #2
Mouse #3
Plasma
-
t=0
37F1
t=48h
-
t=0
37F1
t=48h
Isotype
t=48h
37F1
In vitro
B
Mouse #1
Mouse #2
Mouse #3
Plasma
-
t=0
37F1
t=48h
-
t=0
37F1
t=48h
Isotype
t=48h
37F1
In vitro

Fig. 14

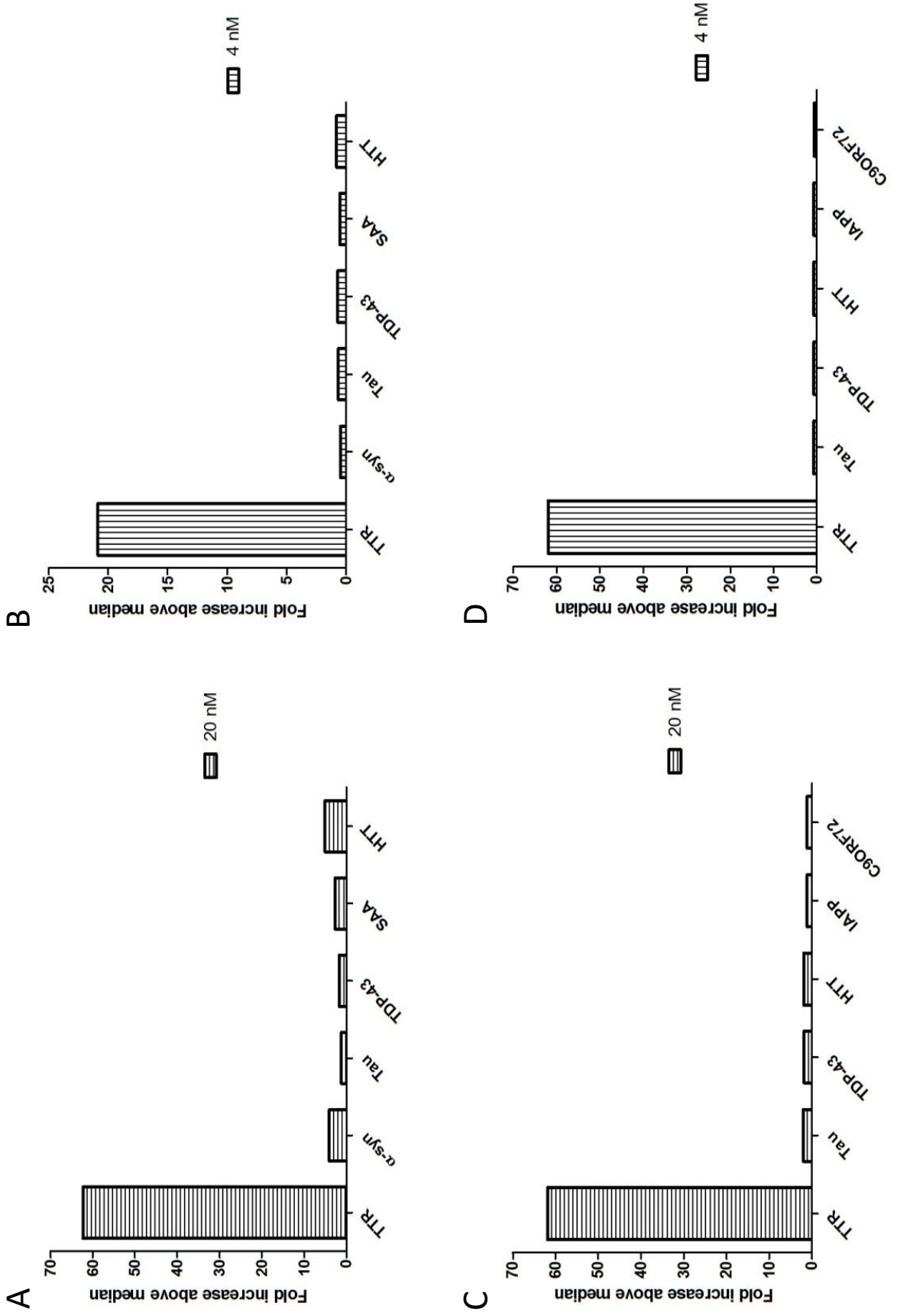

A
20 nM
Fold increase above median
0
10
20
30
40
50
60
70
TTR
α-syn
Tau
TDP-43
SAA
HTT
B
4 nM
Fold increase above median
0
5
10
15
20
25
TTR
α-syn
Tau
TDP-43
SAA
HTT
C
20 nM
Fold increase above median
0
10
20
30
40
50
60
70
TTR
Tau
TDP-43
HTT
IAPP
C9ORF72
D
4 nM
Fold increase above median
0
10
20
30
40
50
60
70
TTR
Tau
TDP-43
HTT
IAPP
C9ORF72

Fig. 15