Fig. 1

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                                   10                  20                  30                  40
                 ------------------+-------------------+-------------------+-------------------+-
mouse3D6VH       E V Q L Q Q S G A D L V R P G A L V K L S C K A S G F N I K D Y Y L H W V R Q R        40
IGHV1-69-2*01    E V Q L V Q S G A E V K K P G A T V K I S C K V S G Y T F T D Y Y M H W V Q Q A        40
2RCS VH hFrwk    Q V Q L Q Q S G A E L V K P G A S V K L S C T A S G F N I K D T Y M H W V K Q R        40
hu3D6 VHvb1      Q V Q L Q Q S G A E L V K P G A S V K L S C T A S G F N I K D Y Y L H W V K Q R        40
hu3D6 VHvb2      E V Q L V Q S G A E V V K P G A S V K I S C K A S G F N I K D Y Y L H W V R Q R        40
hu3D6 VHvb3      E V Q L V Q S G A E V V K P G A T V K I S C K A S G F N I K D Y Y L H W V R Q R        40
hu3D6 VHvb4      E V Q L V Q S G A E V V K P G A T V K I S C K A S G F T I K D Y Y L H W V R Q R        40
hu3D6 VHvb5      E V Q L V Q S G A E V V K P G A T V K I S C K A S G F T I K D Y Y L H W V R Q R        40
hu3D6 VHvb6      E V Q L V Q S G A E V V K P G A T V K I S C K A S G F T I K D Y Y L H W V R Q R        40
hu3D6 VHvb7      E V Q L V Q S G A E V V K P G A T V K I S C K A S G F T I K D Y Y L H W V R Q R        40

                 ------------------+-------------------+-------------------+-------------------+-
                                   50                  60                  70                  80
                 ------------------+-------------------+-------------------+-------------------+-
mouse3D6VH       P E Q G L E W I G W I D P E N G D T V Y D P K F Q G K A T I T A D T S S N T A Y        80
IGHV1-69-2*01    P G K G L E W M G L V D P E D G E T I Y A E K F Q G R V T I T A D T S T D T A Y        80
2RCS VH hFrwk    P E Q G L E W I G R I D P A N G N T K Y D P K F Q G K A T I T A D T S S N T A Y        80
hu3D6 VHvb1      P E Q G L E W I G W I D P E N G D T V Y D P K F Q G K A T I T A D T S S N T A Y        80
hu3D6 VHvb2      P G K G L E W I G W I D P E N G D T V Y D P K F Q G R A T I T A D T S T D T A Y        80
hu3D6 VHvb3      P G K G L E W I G W I D P E N G D T I Y D P K F Q G R A T I T A D T S T D T A Y        80
hu3D6 VHvb4      P G K G L E W I G W I D P E N G D T I Y D P K F Q G R V T I T A D T S T D T A Y        80
hu3D6 VHvb5      P G K G L E W I G W I D P E D G E T I Y D P K F Q G R V T I T A D T S T D T A Y        80
hu3D6 VHvb6      P G K G L E W I G W I D P E D G E T V Y D P K F Q G R V T I T A D T S T D T A Y        80
hu3D6 VHvb7      P G K G L E W I G W I D P E D G E T V Y D P K F Q G R V T I T A D T S T D T A Y        80

                 ------------------+-------------------+-------------------+---------
                                   90                  100                 110
                 ------------------+-------------------+-------------------+---------
mouse3D6VH       L Q L G S L T S E D T A V Y F C S T L D - - F W G Q G T T L T V S S                  112
IGHV1-69-2*01    M E L S S L R S E D T A V Y Y C A T - Q - - H W G Q G T L V T V S S                  111
2RCS VH hFrwk    L Q L S S L T S E D T A V Y Y C A S Y Y G I Y W G Q G T T L T V S S                  114
hu3D6 VHvb1      L Q L S S L T S E D T A V Y F C S T L D - - F W G Q G T T L T V S S                  112
hu3D6 VHvb2      L E L S S L T S E D T A V Y F C S T L D - - F W G Q G T L V T V S S                  112
hu3D6 VHvb3      M E L S S L R S E D T A V Y Y C S T L D - - F W G Q G T L V T V S S                  112
hu3D6 VHvb4      M E L S S L R S E D T A V Y Y C S T L D - - F W G Q G T L V T V S S                  112
hu3D6 VHvb5      M E L S S L R S E D T A V Y Y C S T L D - - F W G Q G T L V T V S S                  112
hu3D6 VHvb6      M E L S S L R S E D T A V Y F C S T L D - - F W G Q G T L V T V S S                  112
hu3D6 VHvb7      M E L S S L R S E D T A V Y Y C S T L D - - F W G Q G T L V T V S S                  112
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Fig. 2

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                  ------------------+-------------------+-------------------+-------------------+-
                                    10                  20                  30                  40
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mouse3D6VL        D V V M T Q T P L T L S V T I G Q P A S I S C K S S Q S L L D S D G K T Y L N W      40
ARX71335_VL_hFrwk D V V M T Q T P L T L S V T I G Q P A S I S C K S S Q S L L Y S N G K T Y L N W      40
IGKV2-30*02       D V V M T Q S P L S L P V T L G Q P A S I S C R S S Q S L V H S D G N T Y L N W      40
hu3D6VLvb1        D V V M T Q T P L T L S V T I G Q P A S I S C K S S Q S L L D S D G K T Y L N W      40
hu3D6VLvb2        D V V M T Q S P L S L S V T L G Q P A S I S C K S S Q S L L D S D G K T Y L N W      40
hu3D6VLvb3        D V V M T Q S P L S L S V T L G E P A S I S C R S S Q S L L D S D G K T Y L N W      40

                  ------------------+-------------------+-------------------+-------------------+-
                                    50                  60                  70                  80
                  ------------------+-------------------+-------------------+-------------------+-
mouse3D6VL        L L Q R P G Q S P K R L I Y L V S K L D S G V P D R F T G S G S G T D F T L K I      80
ARX71335_VL_hFrwk L L Q R P G Q S P K R L I Y L V S K L D S G V P D R F S G S G S G T D F T L K I      80
IGKV2-30*02       F Q Q R P G Q S P R R L I Y K V S N R D S G V P D R F S G S G S G T D F T L K I      80
hu3D6VLvb1        L L Q R P G Q S P K R L I Y L V S K L D S G V P D R F S G S G S G T D F T L K I      80
hu3D6VLvb2        L L Q R P G Q S P K R L I Y L V S K L D S G V P D R F S G S G S G T D F T L K I      80
hu3D6VLvb3        L Q Q R P G Q S P R R L I Y L V S K L D S G V P D R F S G S G S G T D F T L K I      80

                  ------------------+-------------------+-------------------+-----
                                    90                  100                 110
                  ------------------+-------------------+-------------------+-----
mouse3D6VL        S R V E A E D L G V Y Y C W Q G T H F P Y T F G G G T K L E I K R                  113
ARX71335_VL_hFrwk S R V E A E D L G V H Y C E Q G T H F P L T F G A G T K L E L K                    112
IGKV2-30*02       S R V E A E D V G V Y Y C M Q G T H W P Y T F G Q G T K L E I K                    112
hu3D6VLvb1        S R V E A E D L G V H Y C W Q G T H F P Y T F G A G T K L E L K R                  113
hu3D6VLvb2        S R V E A E D V G V Y Y C W Q G T H F P Y T F G A G T K L E I K R                  113
hu3D6VLvb3        S R V E A E D V G V Y Y C W Q G T H F P Y T F G Q G T K L E I K R                  113
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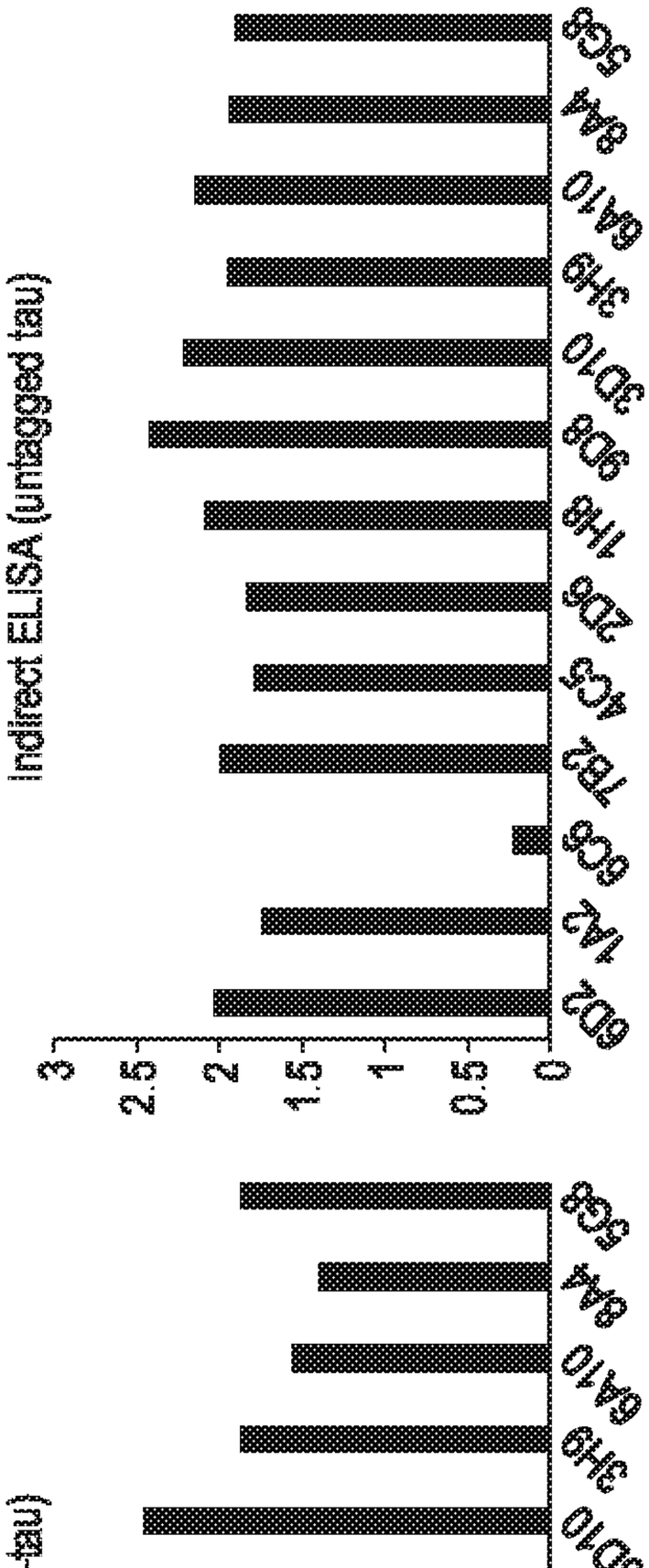

Fig. 3B

Fig. 3A

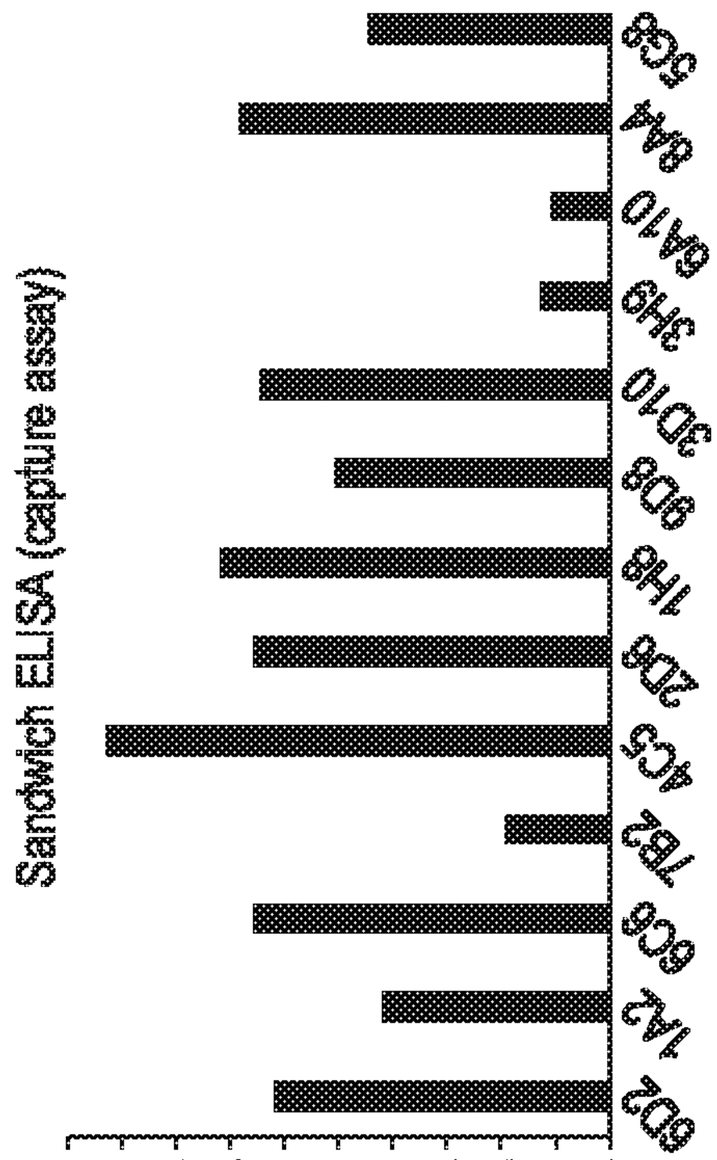

Fig. 3C

Name	$k_a(M^{-1}s^{-1})$	$k_d(s^{-1})$	$k_D(nM)$
3D6	2.58×10^6	1.19×10^{-3}	0.46
1H8	5.07×10^5	5.61×10^{-3}	11.1
3H9	4.71×10^5	1.41×10^{-3}	3.0
5G8	3.75×10^5	2.54×10^{-3}	6.78
6D2	3.83×10^5	3.18×10^{-3}	8.29
7G6	5.76×10^5	3.32×10^{-3}	5.77
8A4	5.99×10^5	2.27×10^{-3}	3.8

Fig. 4

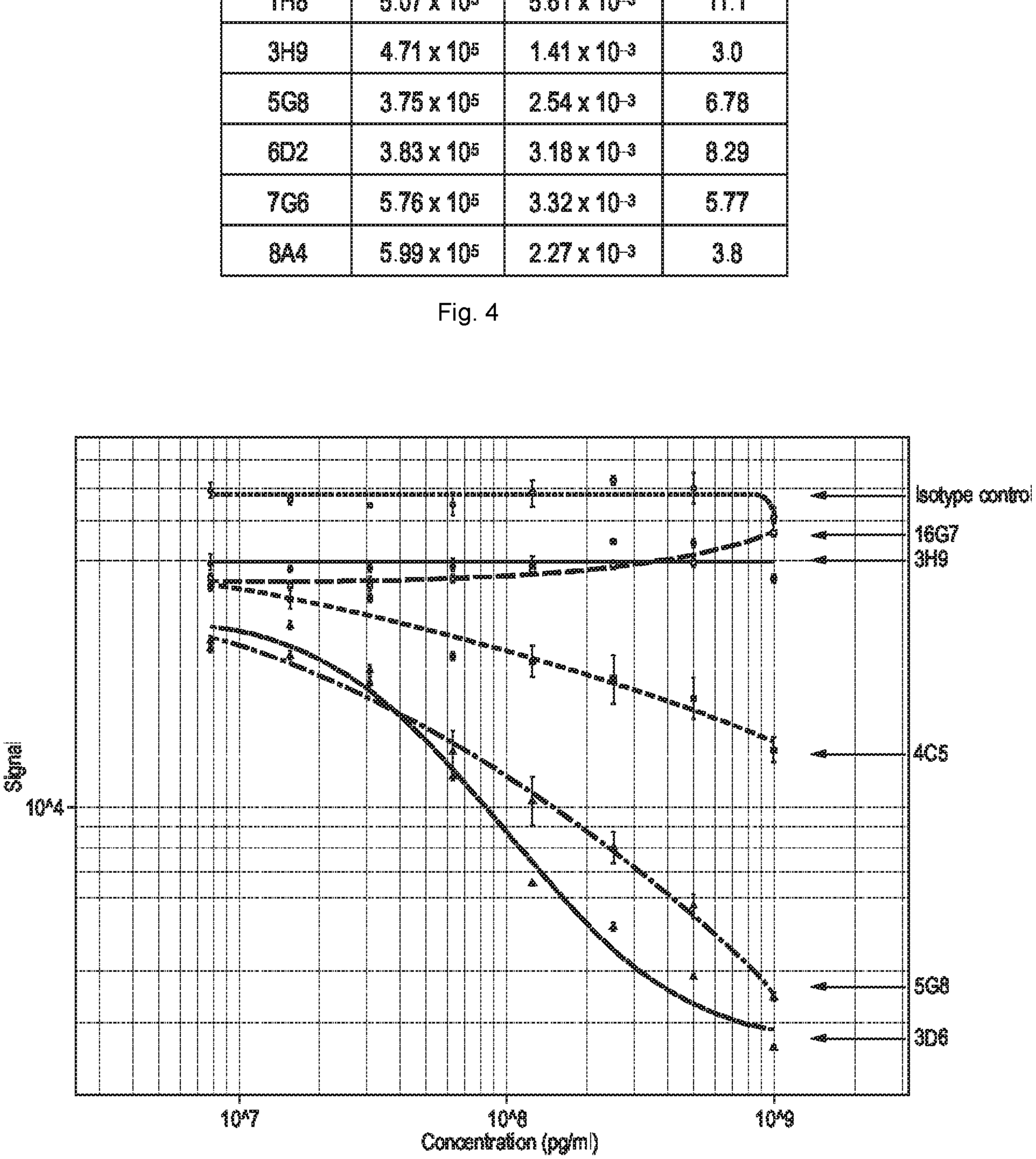

Fig. 5

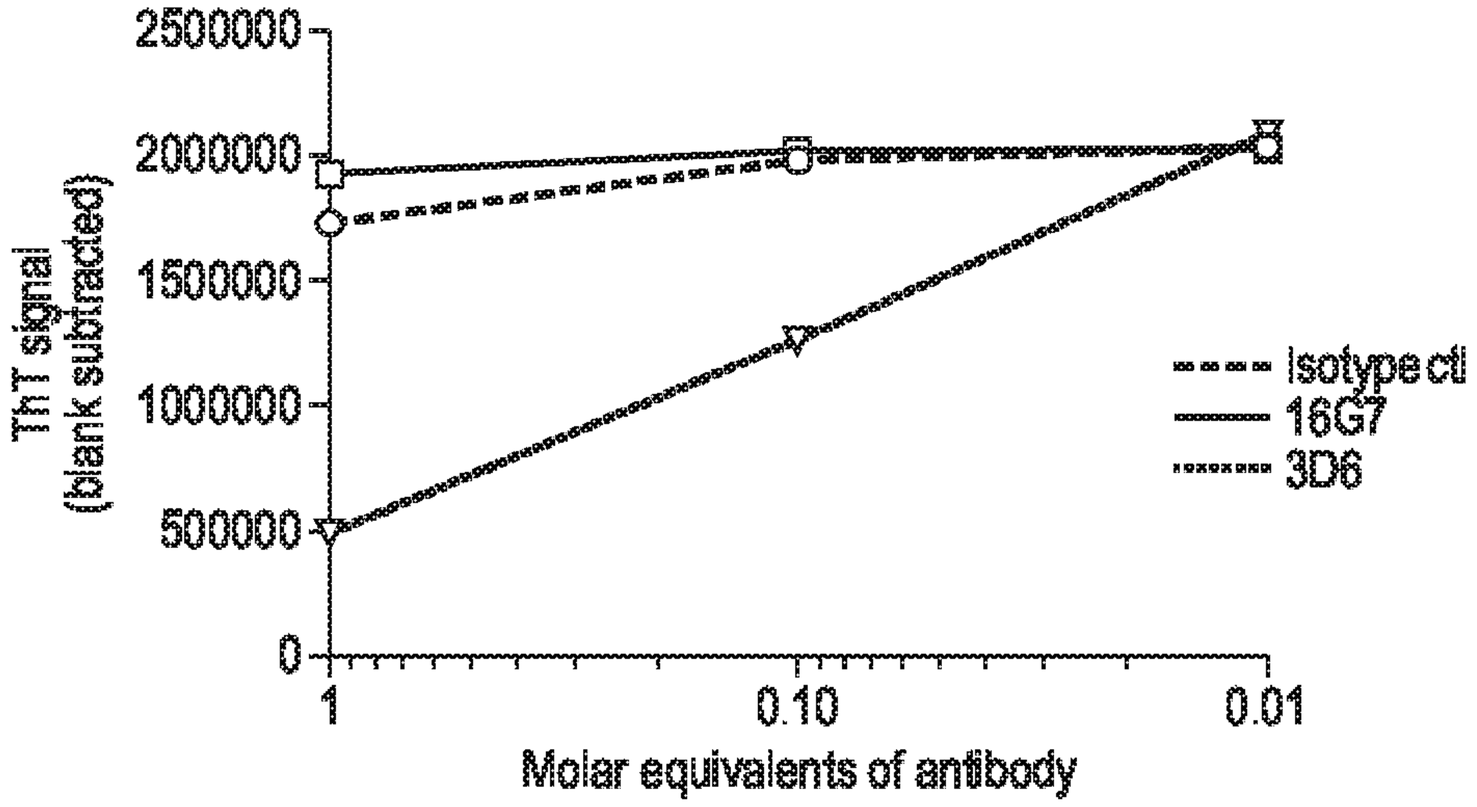
2500000
2000000
1500000
1000000
500000
0
ThT signal
(blank subtracted)
1
0.10
0.01
Molar equivalents of antibody
Isotype ctl
16G7
3D6

Fig. 6

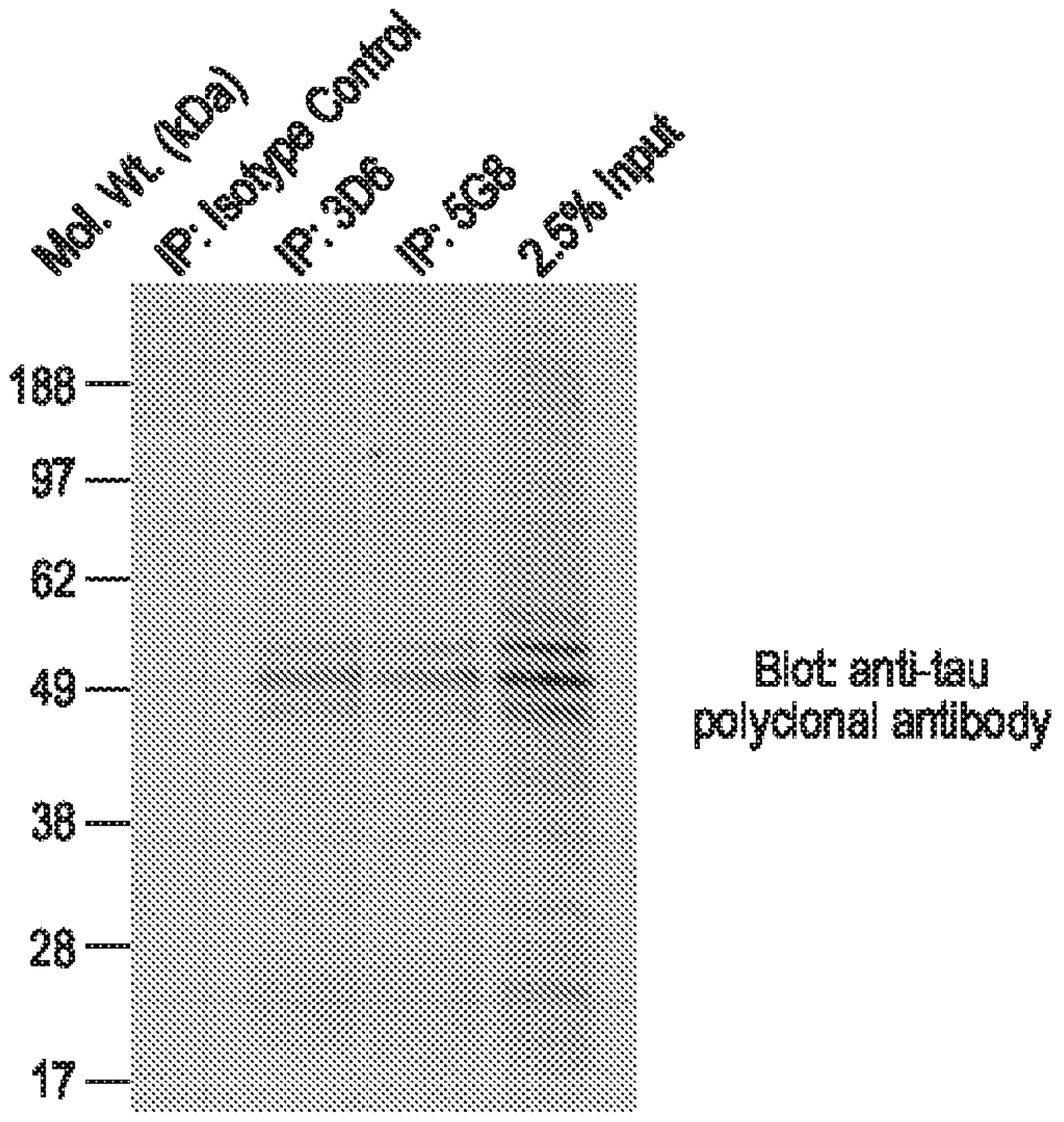
Mol. wt. (kDa)
IP: Isotype Control
IP: 3D6
IP: 5G8
2.5% Input
188
97
62
49
38
28
17
Blot: anti-tau
polyclonal antibody

Fig. 7