Fig. 1A: 32L4 - PpLuc(GC) - albumin7– A64 - C30 - hSL

SEQ ID NO: 205

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CUGGCCGAGGCCAUGAAGCGGUACGGCCUGAACACCAACCACCGGAUCGUGGUGUGCUCG
GAGAACAGCCUGCAGUUCUUCAUGCCGGUGCUGGGCGCCCUCUUCAUCGGCGUGGCCGUC
GCCCCGGCGAACGACAUCUACAACGAGCGGGAGCUGCUGAACAGCAUGGGGAUCAGCCAG
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CUGCCCAUCAUCCAGAAGAUCAUCAUCAUGGACAGCAAGACCGACUACCAGGGCUUCCAG
UCGAUGUACACGUUCGUGACCAGCCACCUCCCGCCGGGCUUCAACGAGUACGACUUCGUC
CCGGAGAGCUUCGACCGGGACAAGACCAUCGCCCUGAUCAUGAACAGCAGCGGCAGCACC
GGCCUGCCGAAGGGGGUGGCCCUGCCGCACCGGACCGCCUGCGUGCGCUUCUCGCACGCC
CGGGACCCCAUCUUCGGCAACCAGAUCAUCCCGGACACCGCCAUCCUGAGCGUGGUGCCG
UUCCACCACGGCUUCGGCAUGUUCACGACCCUGGGCUACCUCAUCUGCGGCUUCCGGGUG
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CAGAGCGCGCUGCUCGUGCCGACCCUGUUCAGCUUCUUCGCCAAGAGCACCCUGAUCGAC
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AACAUCUUCGACGCCGGCGUGGCCGGGCUGCCGGACGACGACGCCGGCGAGCUGCCGGCC
GCGGUGGUGGUGCUGGAGCACGGCAAGACCAUGACGGAGAAGGAGAUCGUCGACUACGUG
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UACCAUGAGAAUAAGAGAAAGAAAAUGAAGAUCAAUAGCUUAUUCAUCUCUUUUUCUUUU
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CUUUUCUCUGUGCUUCAAUUAAUAAAAAAUGGAAAGAACCUAGAUCUAAAAAAAAAAAAA
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Fig. 1A

Fig. 1B: Artificial nucleic acid (SEQ ID NO: 210).

[5'-UTR corresponding to SEQ ID NO: 1] - PpLuc(GC) - albumin7– A64 - C30 – hSL

GGGGAAACAGUGUGGGGCCUAGAGCGCUGGGUGGGCGCGUUCUGCGGCCUGAGCAGGGAC
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UCCCCUAACGAGGUGUCCCACCGGCGCCCGCCGAGGCCUAGGCCUCCGCAGCCGCCCUCC
GUCUCCUCAGCCCCGACGCUGCGCCUUGGGCCUUGUGCGCAUUUUUUUCGGGGGAAAACU
GAGGCUCGGAGUGCGAAAGUCAGCCGAGGUCGCCCCGCCCAGGACAGAGAAGGGCUGUGG
UCGGCUGAUCCGCGGCAUUCCCGGGAAGCUUGAGGAUGGAGGACGCCAAGAACAUCAAGA
AGGGCCCGGCGCCCUUCUACCCGCUGGAGGACGGGACCGCCGGCGAGCAGCUCCACAAGG
CCAUGAAGCGGUACGCCCUGGUGCCGGGCACGAUCGCCUUCACCGACGCCCACAUCGAGG
UCGACAUCACCUACGCGGAGUACUUCGAGAUGAGCGUGCGCCUGGCCGAGGCCAUGAAGC
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ACAACGAGCGGGAGCUGCUGAACAGCAUGGGGAUCAGCCAGCCGACCGUGGUGUUCGUGA
GCAAGAAGGGCCUGCAGAAGAUCCUGAACGUGCAGAAGAAGCUGCCCAUCAUCCAGAAGA
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UAAUAAAAAAUGGAAAGAACCUAGAUCUAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
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U

Fig. 1B

Fig. 1C: Artificial nucleic acid (SEQ ID NO: 211).

32L4 - PpLuc(GC) - [3'-UTR corresponding to SEQ ID NO: 1] – A64 - C30 – hSL

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GACGGGACCGCCGGCGAGCAGCUCCACAAGGCCAUGAAGCGGUACGCCCUGGUG
CCGGGCACGAUCGCCUUCACCGACGCCCACAUCGAGGUCGACAUCACCUACGCG
GAGUACUUCGAGAUGAGCGUGCGCCUGGCCGAGGCCAUGAAGCGGUACGGCCUG
AACACCAACCACCGGAUCGUGGUGUGCUCGGAGAACAGCCUGCAGUUCUUCAUG
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UACAACGAGCGGGAGCUGCUGAACAGCAUGGGGAUCAGCCAGCCGACCGUGGUG
UUCGUGAGCAAGAAGGGCCUGCAGAAGAUCCUGAACGUGCAGAAGAAGCUGCCC
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UCGAUGUACACGUUCGUGACCAGCCACCUCCCGCCGGGCUUCAACGAGUACGAC
UUCGUCCCGGAGAGCUUCGACCGGGACAAGACCAUCGCCCUGAUCAUGAACAGC
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GUGCGCUUCUCGCACGCCCGGGACCCCAUCUUCGGCAACCAGAUCAUCCCGGAC
ACCGCCAUCCUGAGCGUGGUGCCGUUCCACCACGGCUUCGGCAUGUUCACGACC
CUGGGCUACCUCAUCUGCGGCUUCCGGGUGGUCCUGAUGUACCGGUUCGAGGAG
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CCGACCCUGUUCAGCUUCUUCGCCAAGAGCACCCUGAUCGACAAGUACGACCUG
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GAGGCCGUGGCCAAGCGGUUCCACCUCCCGGGCAUCCGCCAGGGCUACGGCCUG
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AUCAUGAGCGGCUACGUGAACAACCCGGAGGCCACCAACGCCCUCAUCGACAAG
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Fig. 1C

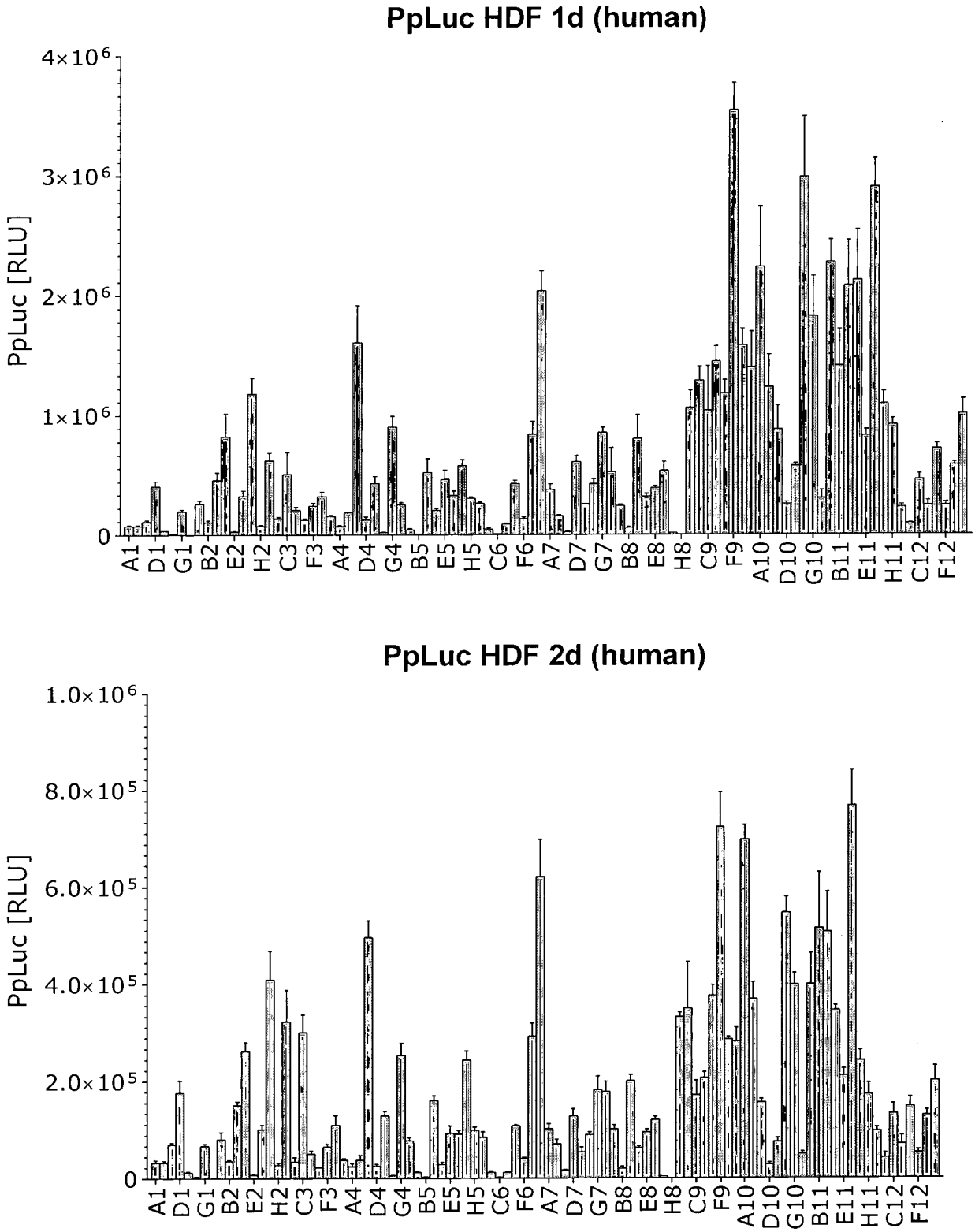

PpLuc HDF 1d (human)
PpLuc [RLU]
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3×10^6
2×10^6
1×10^6
0
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PpLuc HDF 2d (human)
PpLuc [RLU]
1.0×10^6
8.0×10^5
6.0×10^5
4.0×10^5
2.0×10^5
0
A1 D1 G1 B2 E2 H2 C3 F3 A4 D4 G4 B5 E5 H5 C6 F6 A7 D7 G7 B8 E8 H8 C9 F9 A10 D10 G10 B11 E11 H11 C12 F12

Fig. 2

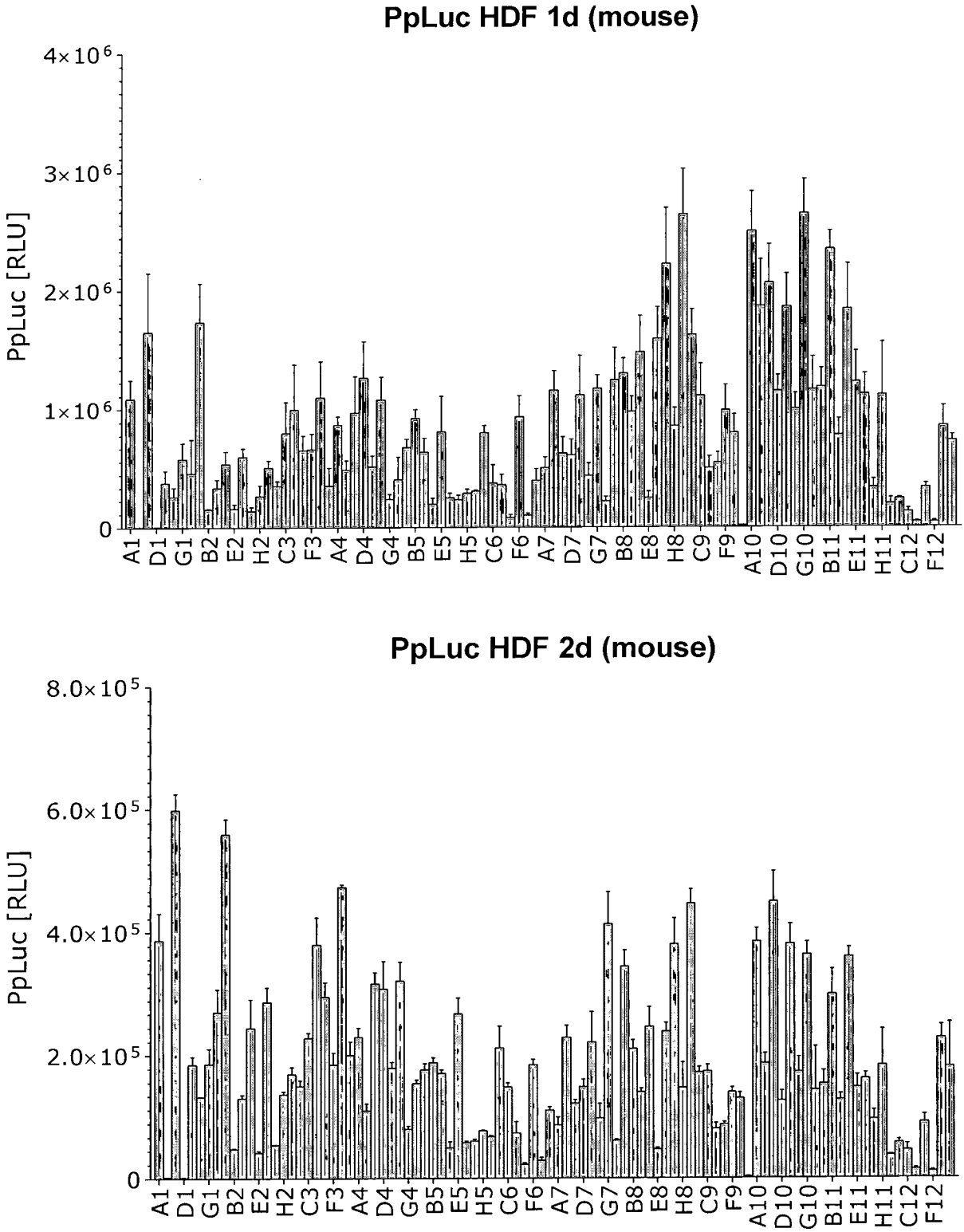

PpLuc HDF 1d (mouse)
PpLuc [RLU]
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3×10^6
2×10^6
1×10^6
0
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PpLuc HDF 2d (mouse)
PpLuc [RLU]
8.0×10^5
6.0×10^5
4.0×10^5
2.0×10^5
0
A1 D1 G1 B2 E2 H2 C3 F3 A4 D4 G4 B5 E5 H5 C6 F6 A7 D7 G7 B8 E8 H8 C9 F9 A10 D10 G10 B11 E11 H11 C12 F12

Fig. 3

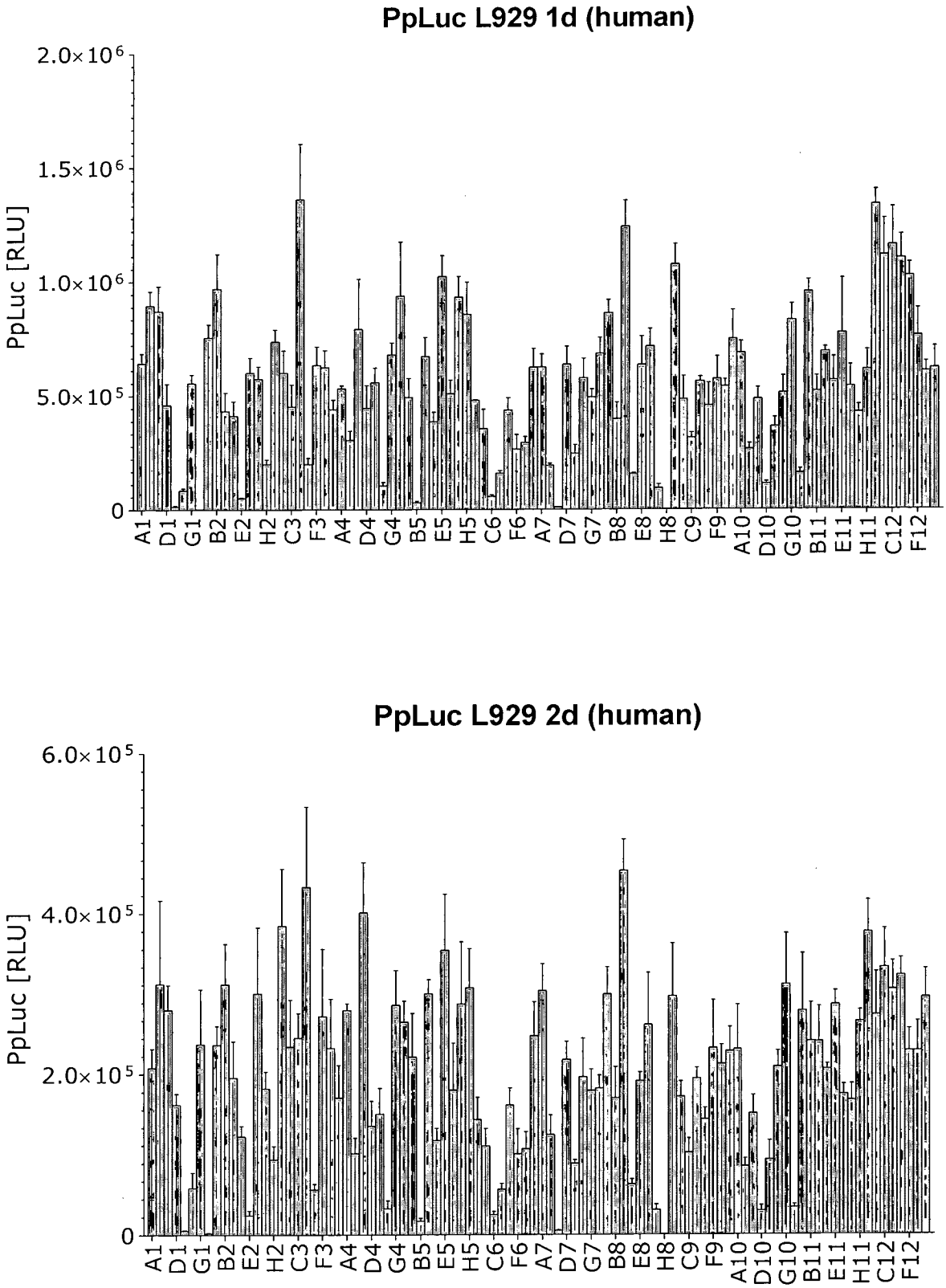

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PpLuc [RLU]
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1.5×10⁶
1.0×10⁶
5.0×10⁵
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PpLuc L929 2d (human)
PpLuc [RLU]
6.0×10⁵
4.0×10⁵
2.0×10⁵
0
A1 D1 G1 B2 E2 H2 C3 F3 A4 D4 G4 B5 E5 H5 C6 F6 A7 D7 G7 B8 E8 H8 C9 F9 A10 D10 G10 B11 E11 H11 C12 F12

Fig. 4

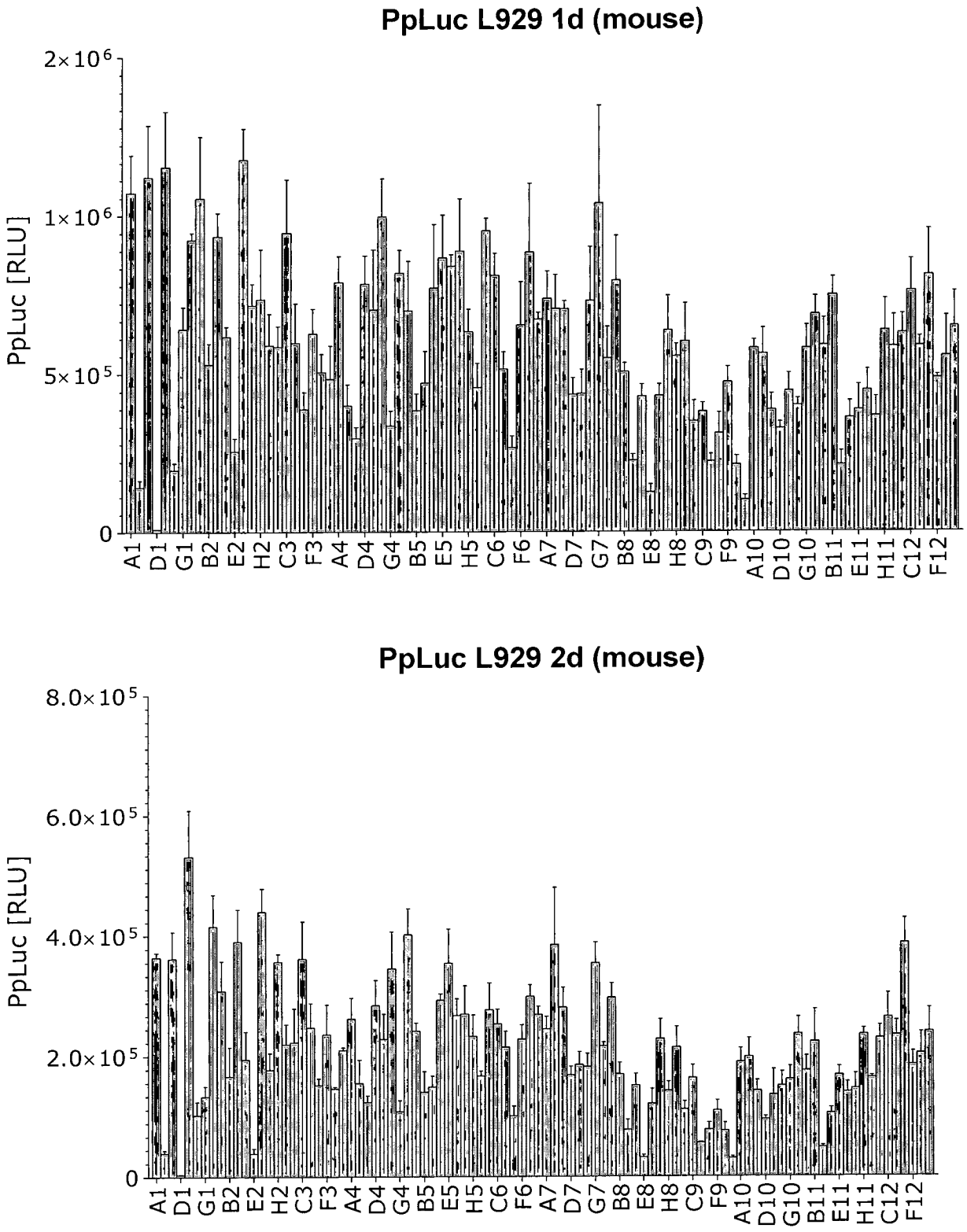

PpLuc L929 1d (mouse)
PpLuc [RLU]
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1×10^6
5×10^5
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PpLuc L929 2d (mouse)
PpLuc [RLU]
8.0×10^5
6.0×10^5
4.0×10^5
2.0×10^5
0
A1 D1 G1 B2 E2 H2 C3 F3 A4 D4 G4 B5 E5 H5 C6 F6 A7 D7 G7 B8 E8 H8 C9 F9 A10 D10 G10 B11 E11 H11 C12 F12

Fig. 5

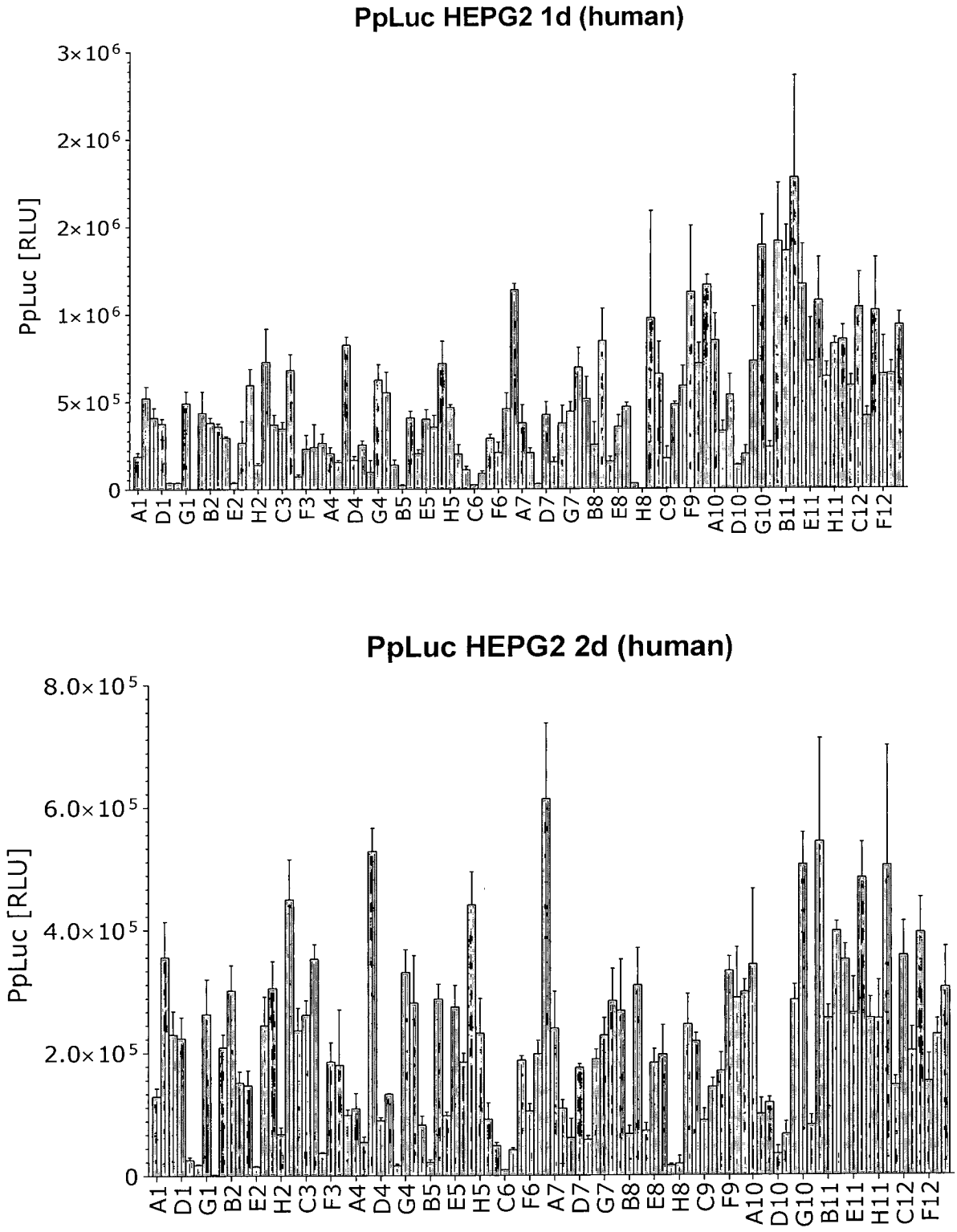

PpLuc HEPG2 1d (human)
PpLuc [RLU]
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2×10⁶
2×10⁶
1×10⁶
5×10⁵
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PpLuc HEPG2 2d (human)
PpLuc [RLU]
8.0×10⁵
6.0×10⁵
4.0×10⁵
2.0×10⁵
0
A1 D1 G1 B2 E2 H2 C3 F3 A4 D4 G4 B5 E5 H5 C6 F6 A7 D7 G7 B8 E8 H8 C9 F9 A10 D10 G10 B11 E11 H11 C12 F12

Fig. 6

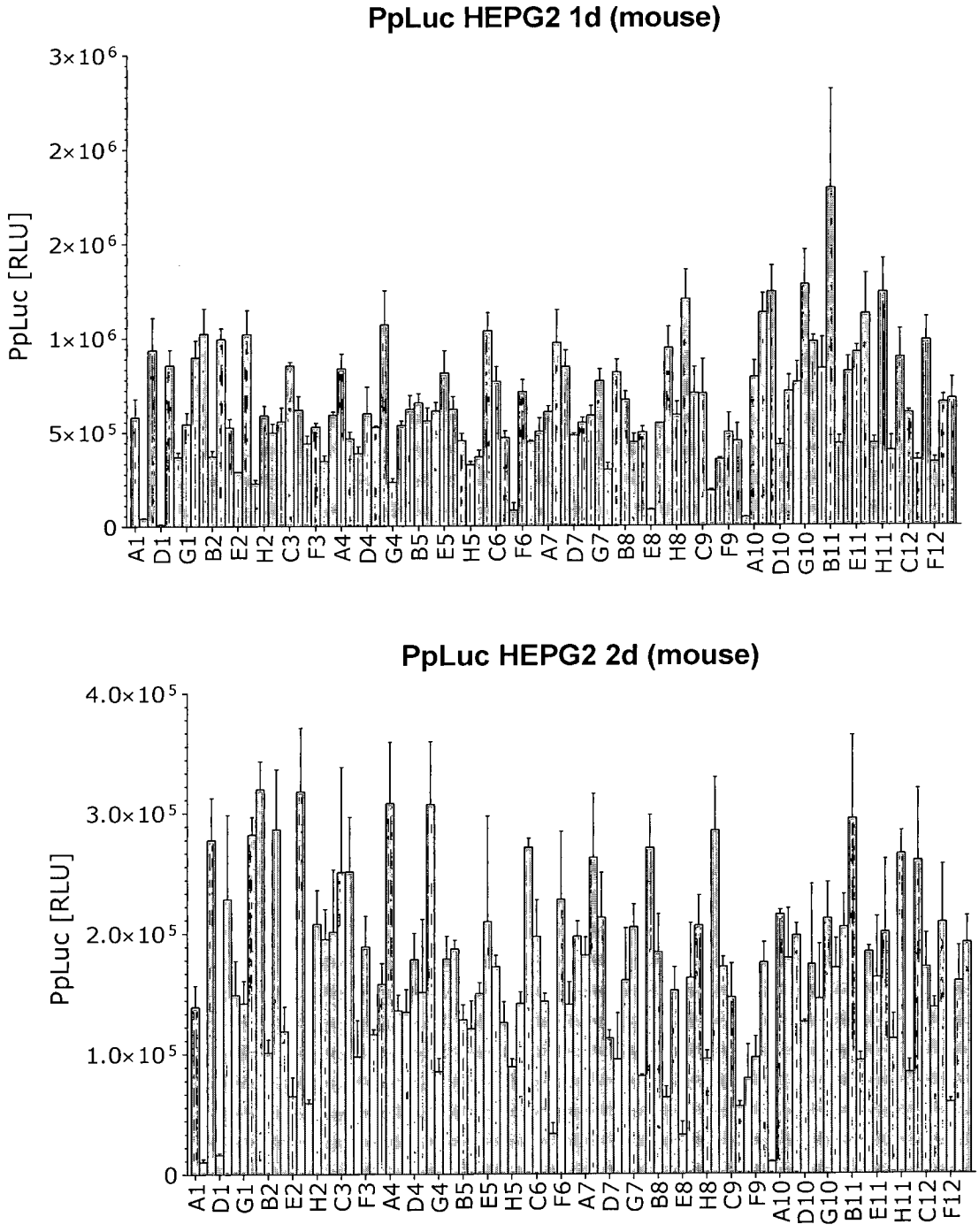

PpLuc HEPG2 1d (mouse)
PpLuc [RLU]
3×10^6
2×10^6
2×10^6
1×10^6
5×10^5
0
A1 D1 G1 B2 E2 H2 C3 F3 A4 D4 G4 B5 E5 H5 C6 F6 A7 D7 G7 B8 E8 H8 C9 F9 A10 D10 G10 B11 E11 H11 C12 F12
PpLuc HEPG2 2d (mouse)
PpLuc [RLU]
4.0×10^5
3.0×10^5
2.0×10^5
1.0×10^5
0
A1 D1 G1 B2 E2 H2 C3 F3 A4 D4 G4 B5 E5 H5 C6 F6 A7 D7 G7 B8 E8 H8 C9 F9 A10 D10 G10 B11 E11 H11 C12 F12

Fig. 7

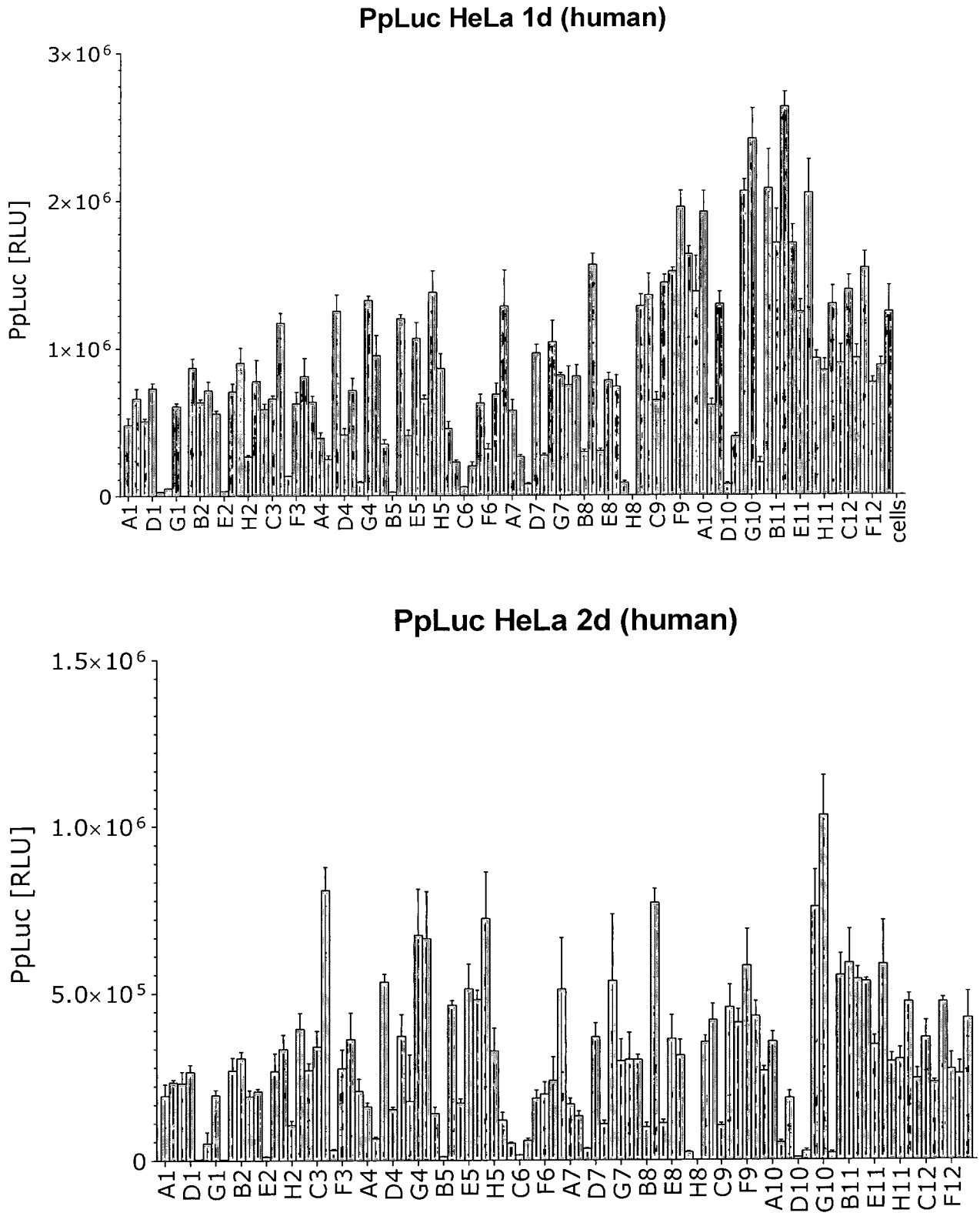

PpLuc HeLa 1d (human)
PpLuc [RLU]
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2×10^6
1×10^6
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A1 D1 G1 B2 E2 H2 C3 F3 A4 D4 G4 B5 E5 H5 C6 F6 A7 D7 G7 B8 E8 H8 C9 F9 A10 D10 G10 B11 E11 H11 C12 F12 cells
PpLuc HeLa 2d (human)
PpLuc [RLU]
1.5×10^6
1.0×10^6
5.0×10^5
0
A1 D1 G1 B2 E2 H2 C3 F3 A4 D4 G4 B5 E5 H5 C6 F6 A7 D7 G7 B8 E8 H8 C9 F9 A10 D10 G10 B11 E11 H11 C12 F12

Fig. 8

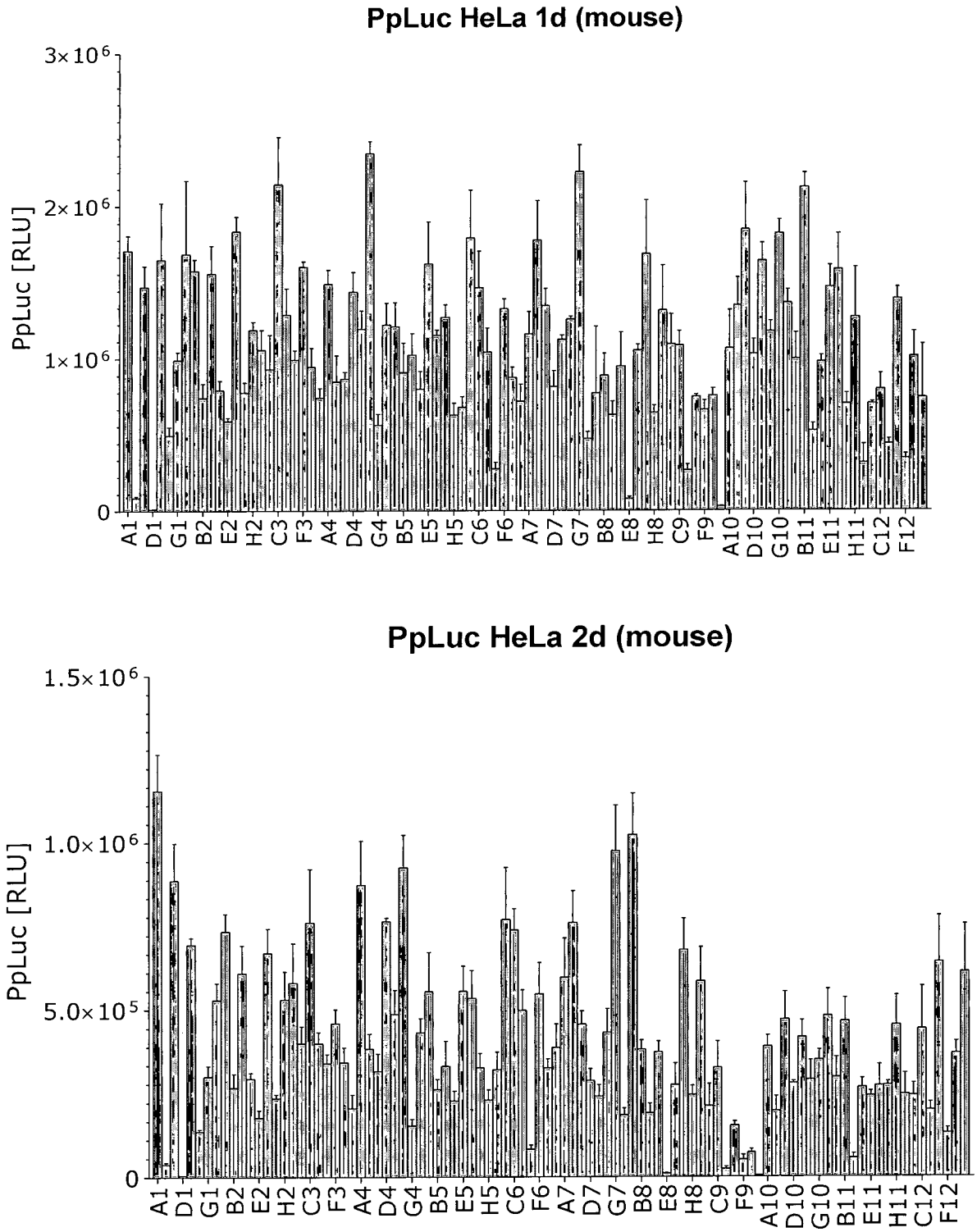

PpLuc HeLa 1d (mouse)
PpLuc [RLU]
3×10^6
2×10^6
1×10^6
0
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PpLuc HeLa 2d (mouse)
PpLuc [RLU]
1.5×10^6
1.0×10^6
5.0×10^5
0
A1 D1 G1 B2 E2 H2 C3 F3 A4 D4 G4 B5 E5 H5 C6 F6 A7 D7 G7 B8 E8 H8 C9 F9 A10 D10 G10 B11 E11 H11 C12 F12

Fig. 9