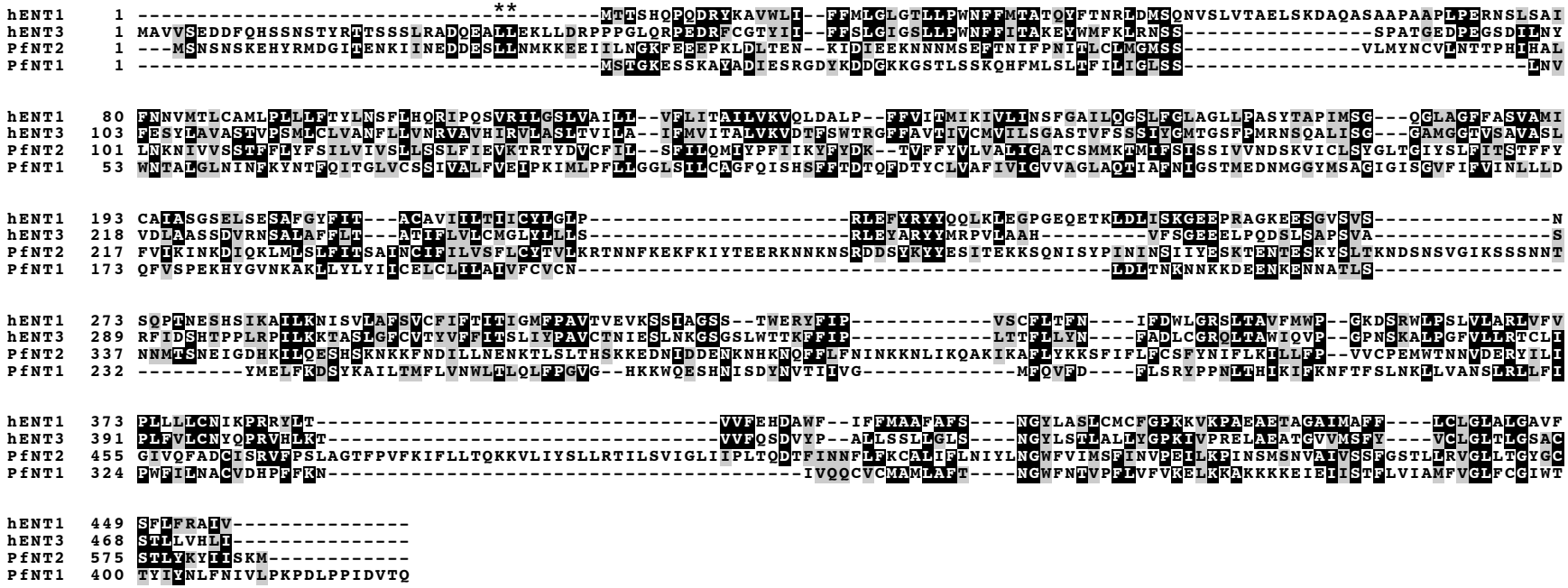

Supplementary Fig. 1: Sequence alignment of PfNT2 with *Plasmodium falciparum* PfNT1, human purine transporters hENT1 and hENT3. Identical amino acids are highlighted in black boxes, and similar residues are highlighted in grey boxes; hyphens indicate gaps. A dileucine motif in the PfNT2 amino terminal domain similar to that responsible for intracellular localization in hENT3 is indicated by (**).

Supplementary Table 1
Primers used for the construction of codon optimised *PfNT2*$_{co}$.

Primer Name	Sequence	
1	sens	ATG AGC AAT TCT AAC AGC AAG GAG CAC TAC AGA ATG GAC GGA ATC ACA
2	antisens	TTCATTGATGATCTTGTTTTCTGTGATTCCGTCCATTCTGTAGTGCTC
3	sens	GAA AAC AAG ATC ATC AAT GAA GAT GAT GAA AGT CTC TTG AAC ATG AAG
4	antisens	ATTCAAGATGATTTCTTCCTTCTTCATGTTCAAGAGACTTTCATCATC
5	sens	AAG GAA GAA ATC ATC TTG AAT GGA AAA TTC GAA GAA GAG CCA AAG CTT
6	antisens	AAG GAA GAA ATC ATC TTG AAT GGA AAA TTC GAA GAA GAG CCA AAG CTT
7	sens	GAT CTG ACC GAA AAC AAG ATC GAT ATC GAA GAG AAG AAC AAC AAC ATG
8	antisens	GAAGATGTTTGTGAACTCACTCATGTTGTTGTTCTTCTCTTCGATATC
9	sens	AGT GAG TTC ACA AAC ATC TTC CCA AAC ATC ACA CTG TGT CTG ATG GGA
10	antisens	GTACATTAGTACAGATGACATTCCCATCAGACACAGTGTGATGTTTGG
11	sens	ATG TCA TCT GTA CTA ATG TAC AAC TGC GTA CTG AAC ACA ACA CCT CAT
12	antisens	CTTGTTCAGCAGTGCATGGATATGAGGTGTTGTGTTCAGTACGCAGTT
13	sens	ATC CAT GCA CTG CTG AAC AAG AAC ATC GTA GTA TCT TCA ACC TTC TTC
14	antisens	AACCAGGATAGAGAAGTATAGGAAGAAGGTTGAAGATACTACGATGTT
15	sens	CTA TAC TTC TCT ATC CTG GTT ATC GTA TCA TTG TTA AGT TCC CTA TTC
16	antisens	TGTTCTTGTCTTTACCTCGATGAATAGGGAACTTAACAATGATACGAT
17	sens	ATC GAG GTA AAG ACA AGA ACA TAC GAT GTG TGT TTC ATC CTA TCA TTC
18	antisens	TGGGTATATCATTTGTAGGATGAATGATAGGATGAAACACACATCGTA
19	sens	ATCCTACAAATGATATACCCATTCATCATCAAGTACTTCTACGATAAG
20	antisens	TAGTACGTAGAAGAAAACGGTCTTATCGTAGAAGTACTTGATGATGAA
21	sens	ACC GTT TTC TTC TAC GTA CTA GTA GCA CTA ATC GGT GCT ACG TGC TCT
22	antisens	GAATATCATGGTCTTCATCATAGAGCACGTAGCACCGATTAGTGCTAC
23	sens	ATG ATG AAG ACC ATG ATA TTC TCC ATC TCT TCC ATC GTT GTA AAC GAT
24	antisens	TGATAGACAGATAACCTTTGAATCGTTTACAACGATGGAAGAGATGGA
25	sens	TCA AAG GTT ATC TGT CTA TCA TAC GGT TTG ACT GGG ATC TAC TCT CTA
26	antisens	GAAGAATGTGGATGTGATGAATAGAGAGTAGATCCCAGTCAAACCGT
27	sens	TTC ATC ACA TCC ACA TTC TTC TAC TTC GTT ATT AAG ATC AAC AAG GAT
28	antisens	TGACAGCATCAACTTTTGGATATCCTTGTTGATCTTAATAACGAAGTA
29	sens	ATC CAA AAG TTG ATG CTG TCA CTG TTC ATC ACA TCA GCC ATC AAC TGT
30	antisens	GAAAGACACTAGGATGAAGATACAGTTGATGGCTGATGTGATGAACAG
31	sens	ATC TTC ATC CTA GTG TCT TTC CTA TGT TAC ACT GTA CTA AAG AGA ACA
32	antisens	GAACTTTTCCTTGAAGTTGTTTGTTCTCTTTAGTACAGTGTAACATAG
33	sens	AAC AAC TTC AAG GAA AAG TTC AAG ATC TAC ACA GAA GAG AGA AAG AAC
34	antisens	ATCATCACGTGAGTTCTTGTTGTTCTTTCTCTCTTCTGTGTAGATCTT
35	sens	AAC AAG AAC TCA CGT GAT GAT TCT TAC AAG TAC TAC GAA AGT ATC ACT
36	antisens	GATGTTTTGTGACTTCTTTTCAGTGATACTTTCGTAGTACTTGTAAGA
37	sens	GAA AAG AAG TCA CAA AAC ATC TCA TAC CCA ATC AAC ATC AAC AGT ATC
38	antisens	TTCTGTCTTACTTTCGTAGATGATACTGTTGATGTTGATTGGGTATGA
39	sens	ATC TAC GAA AGT AAG ACA GAA AAC ACG GAA TCC AAG TAC TCA CTA ACA
40	antisens	AACTGAGTTAGAATCGTTCTTTGTTAGTGAGTACTTGGATTCCGTGTT
41	sens	AAG AAC GAT TCT AAC TCA GTT GGT ATC AAG AGT AGT AGT AAC AAC ACT
42	antisens	TTCGTTACTAGTCATGTTGTTAGTGTTGTTACTACTACTCTTGATACC
43	sens	AAC AAC ATG ACT AGT AAC GAA ATC GGA GAT CAT AAG ATC CTA CAA GAA
44	antisens	CTTCTTGTTCTTTGAATGAGATTCTTGTAGGATCTTATGATCTCCGAT
45	sens	TCT CAT TCA AAG AAC AAG AAG TTC AAC GAC ATC CTT CTT AAC GAA AAC
46	antisens	ATGAGTAAGTGATAGTGTCTTGTTTTCGTTAAGAAGGATGTCGTTGAA
47	sens	AAG ACA CTA TCA CTT ACT CAT AGT AAG AAG GAA GAT AAC ATC GAT GAC
48	antisens	GTTCTTATGGTTCTTGTTTTCGTCATCGATGTTATCTTCCTTCTTACT
49	sens	GAA AAC AAG AAC CAT AAG AAC CAA TTC TTC CTA TTC AAC ATC AAC AAG
50	antisens	GGCTTGCTTGATCAGGTTCTTCTTGTTGATGTTGAATAGGAAGAATTG
51	sens	AAG AAC CTG ATC AAG CAA GCC AAG ATC AAG GCA TTC CTG TAC AAG AAG
52	antisens	ACAGAATAGGAAGATGAACGACTTCTTGTACAGGAATGCCTTGATCTT
53	sens	TCG TTC ATC TTC CTA TTC TGT AGC TTC TAC AAC ATC TTC CTC AAG ATC
54	antisens	ACAAACAACCGGGAACAGCAGGATCTTGAGGAAGATGTTGTAGAAGCT
55	sens	CTG CTG TTC CCG GTT GTT TGT CCA GAA ATG TGG ACT AAC AAC GTT GAT
56	antisens	TCCGATTAGGATGTATCTTTCATCAACGTTGTTAGTCCACATTTCTGG
57	sens	GAA AGA TAC ATC CTA ATC GGA ATC GTG CAA TTC GCT GAT TGT ATC AGT
58	antisens	TGCAAGGGATGGGAAAACACGACTGATACAATCAGCGAATTGCACGAT
59	sens	CGT GTT TTC CCA TCC CTT GCA GGA ACA TTC CCA GTA TTC AAG ATC TTC
60	antisens	TACCTTCTTTTGTGTCAAGAGGAAGATCTTGAATACTGGGAATGTTCC
61	sens	CTC TTG ACA CAA AAG AAG GTA TTA ATT TAC TCT CTA CTG AGA ACT ATC
62	antisens	GATCAATCCGATTACAGACAGGATAGTTCTCAGTAGAGAGTAAATTAA
63	sens	CTG TCT GTA ATC GGA TTG ATC ATC CCA CTG ACA CAA GAT ACA TTC ATC
64	antisens	ACACTTGAAAAGGAAGTTGTTGATGAATGTATCTTGTGTCAGTGGGAT
65	sens	AAC AAC TTC CTT TTC AAG TGT GCA CTC ATC TTC CTG AAC ATC TAC CTG
66	antisens	CATGATAACGAACCAACCGTTCAGGTAGATGTTCAGGAAGATGAGTGC
67	sens	AAC GGT TGG TTC GTT ATC ATG TCT TTC ATT AAC GTT CCA GAA ATC CTC
68	antisens	ACTCATTGAGTTGATAGGCTTGAGGATTTCTGGAACGTTAATGAAAGA
69	sens	AAG CCT ATC AAC TCA ATG AGT AAC GTT GCA ATC GTT AGT AGT TTC GGT
70	antisens	GCCAACTCGAAGGAGTGTTGAACCGAAACTACTAACGATTGCAACGTT
71	sens	TCA ACA CTC CTT CGA GTT GGC TTG CTG ACA GGC TAC GGA
72	antisens	CATCTTTGAGATGATGTACTTGTATAGTGTGGAACATCCGTAGCCTGTCAGCAA
73	sens	TGT TCC ACA CTA TAC AAG TAC ATC ATC TCA AAG ATG