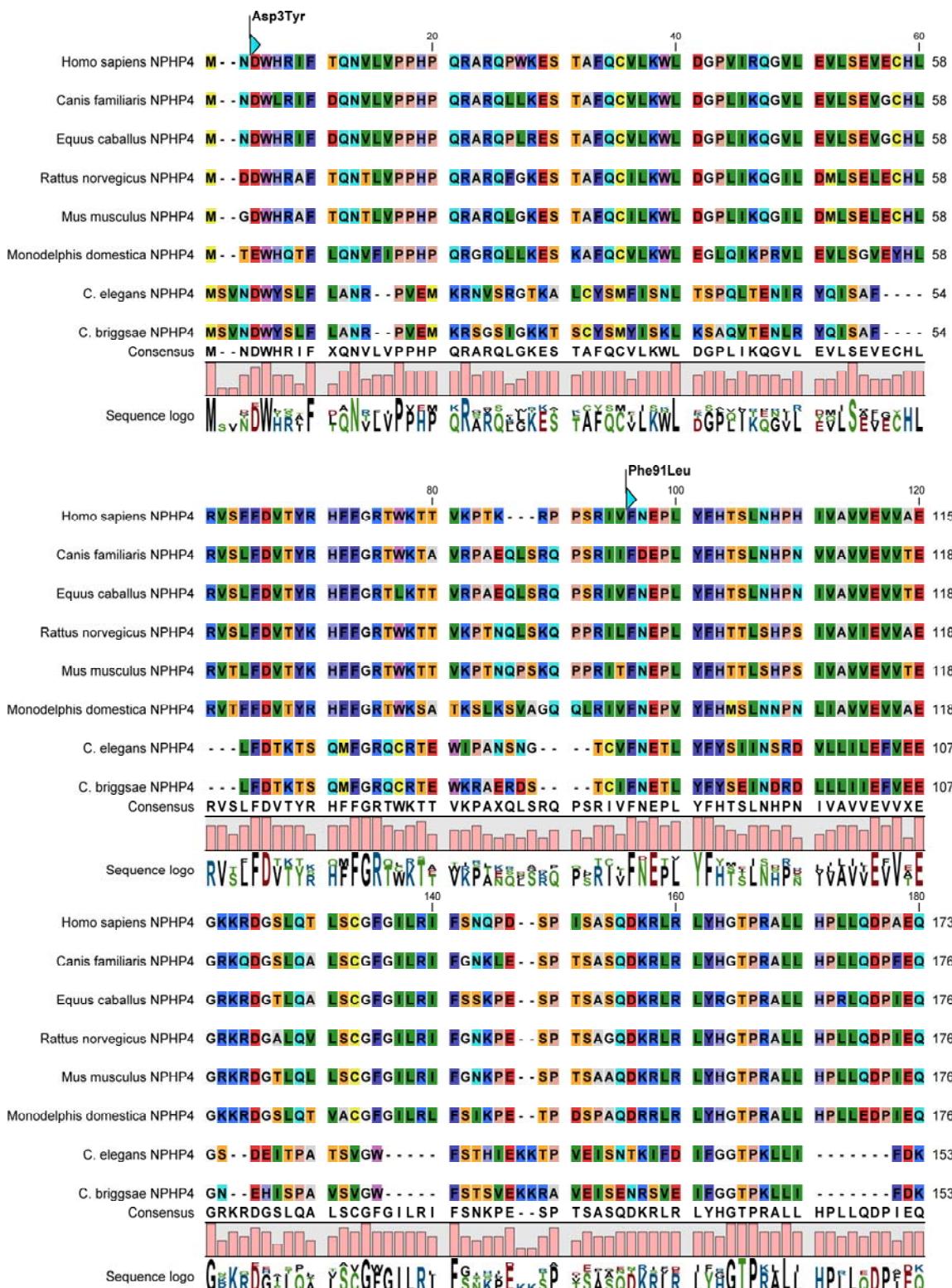
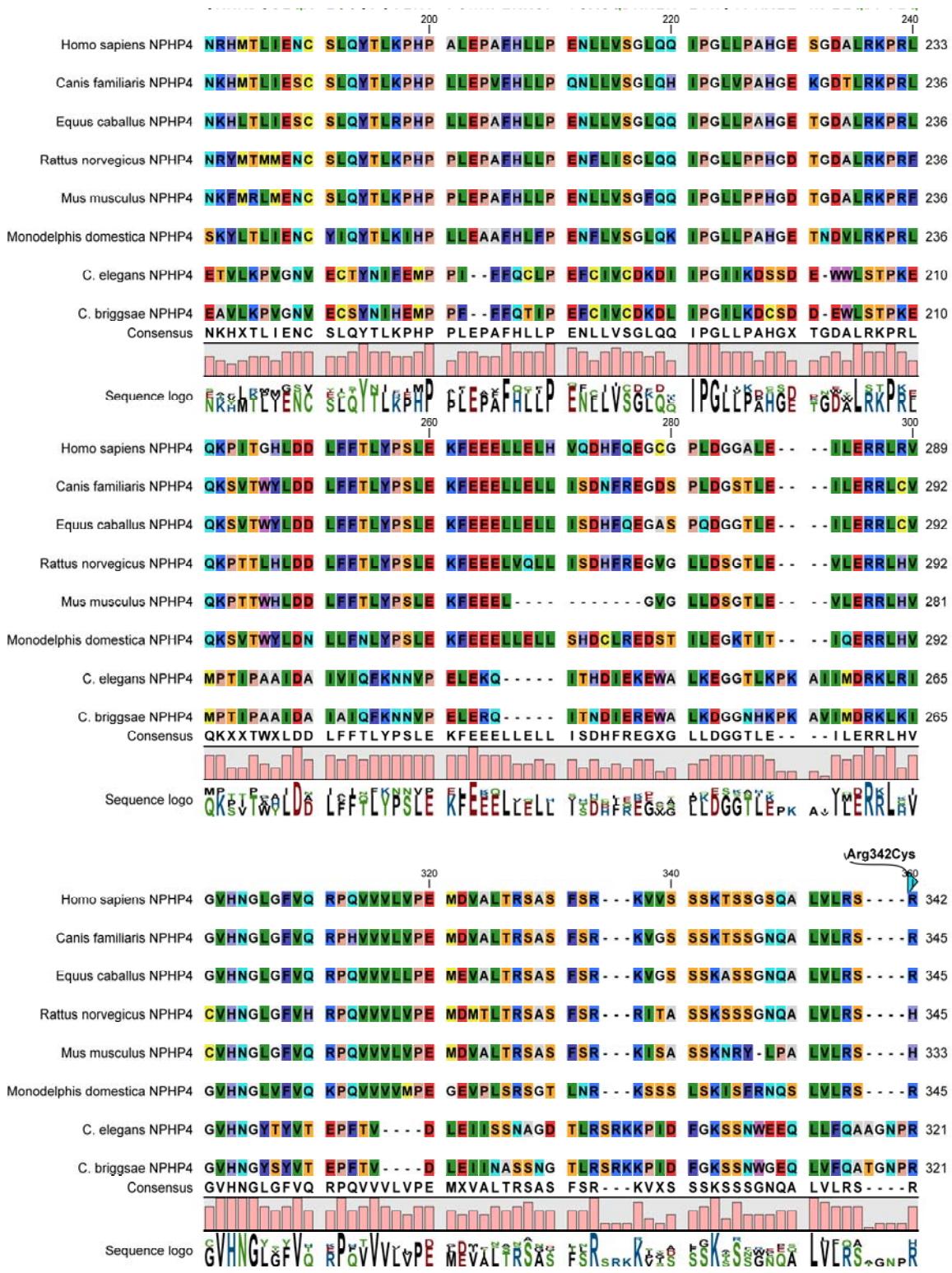
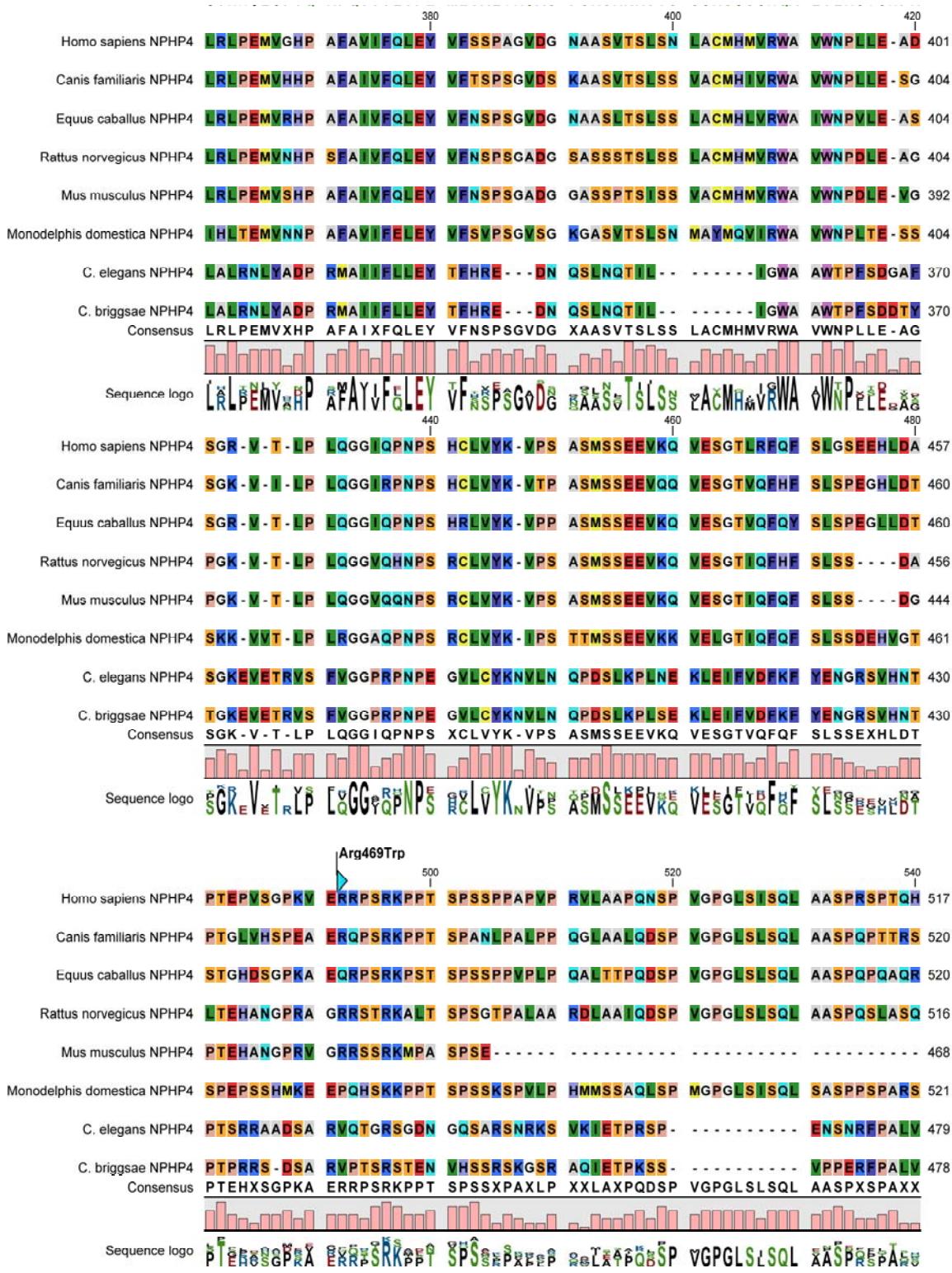
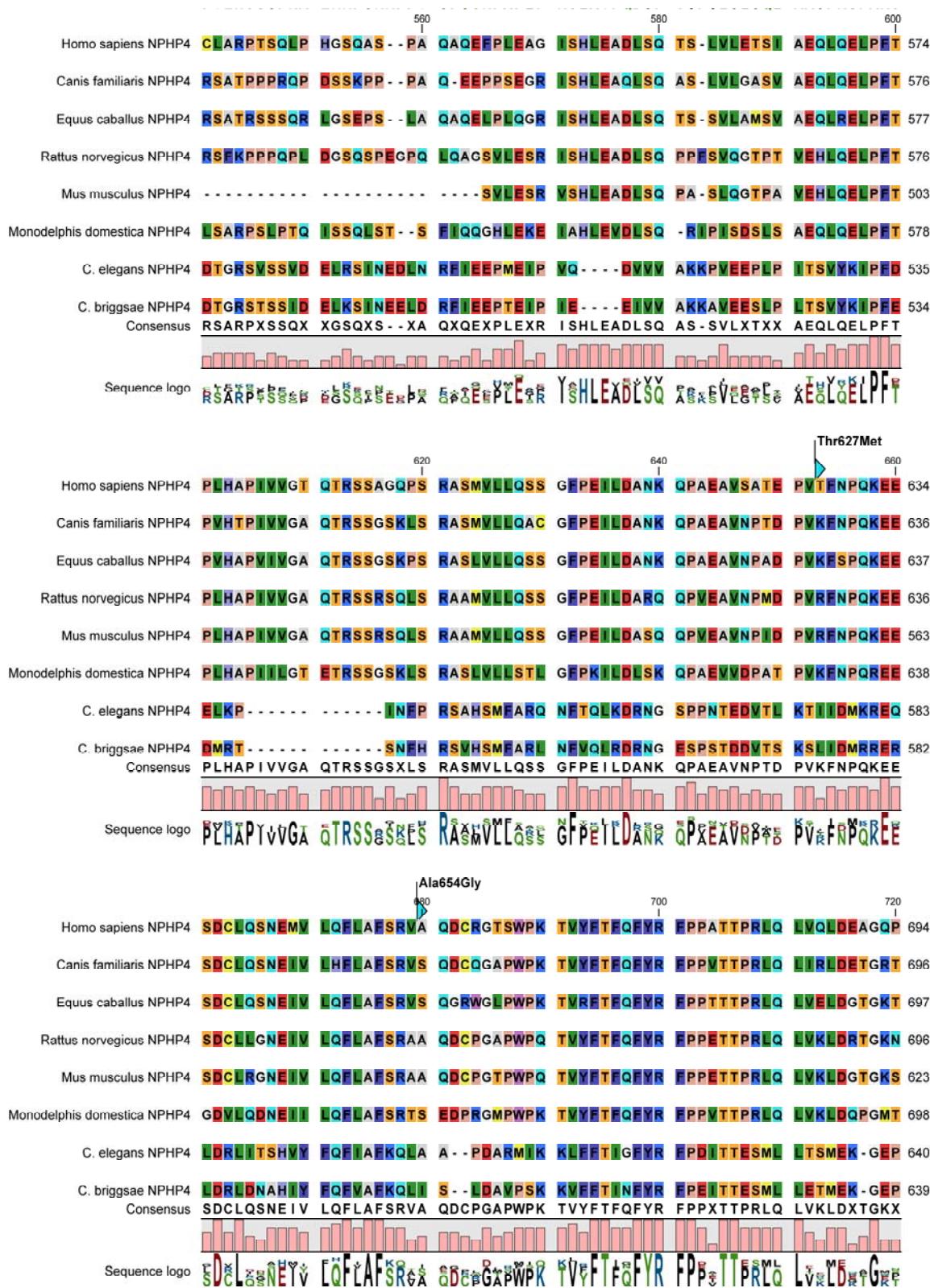


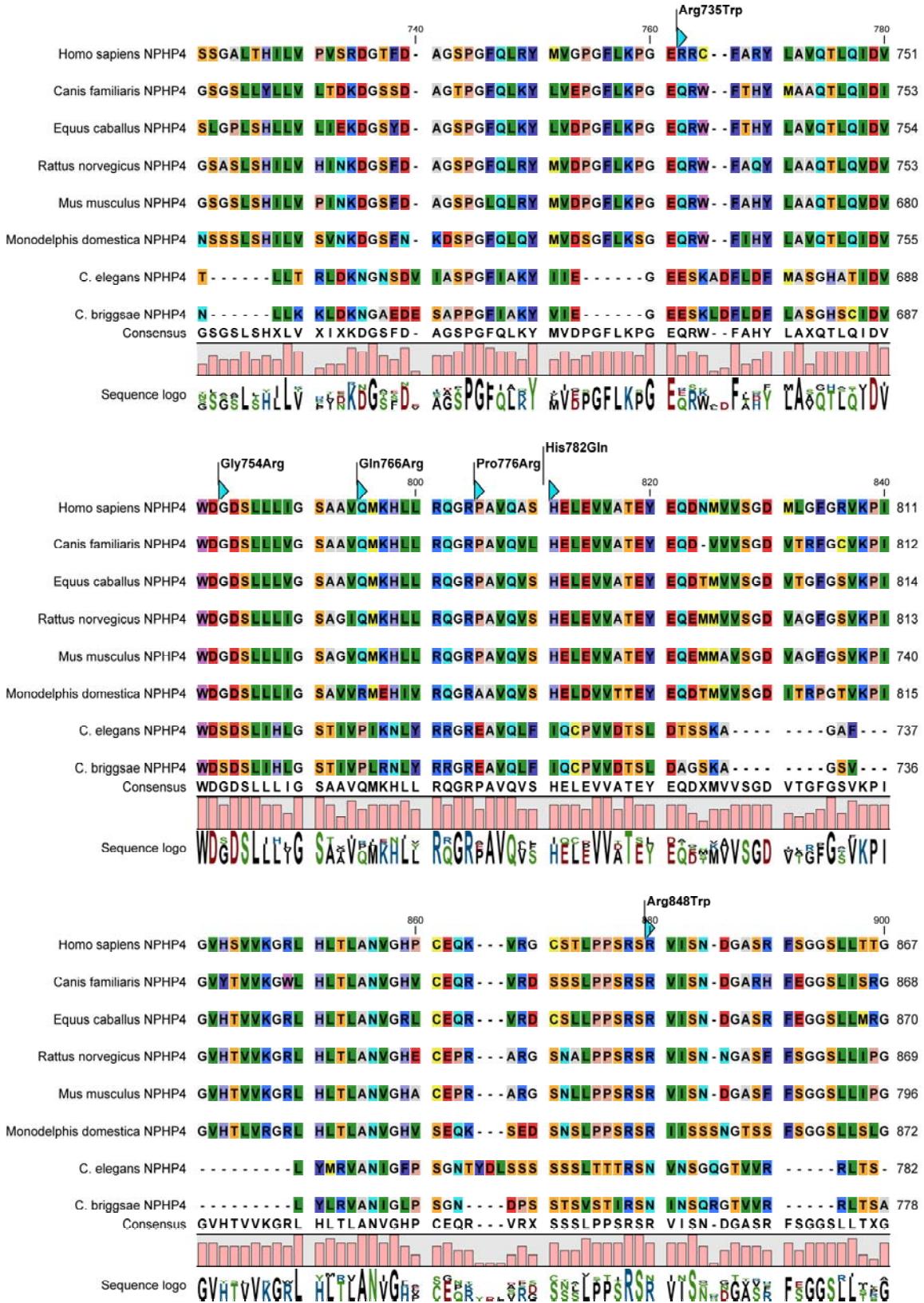
Supplemental Figure 1

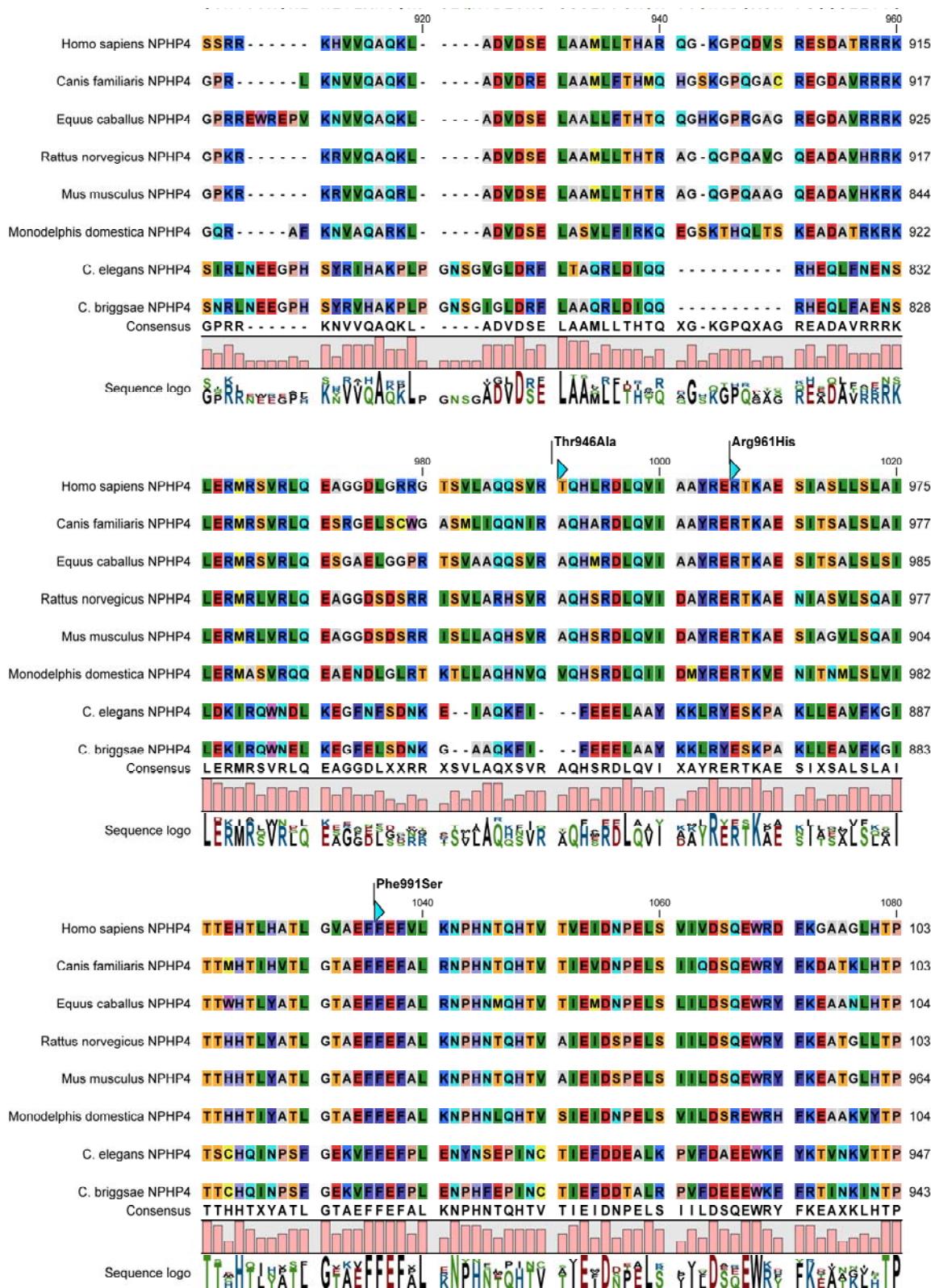


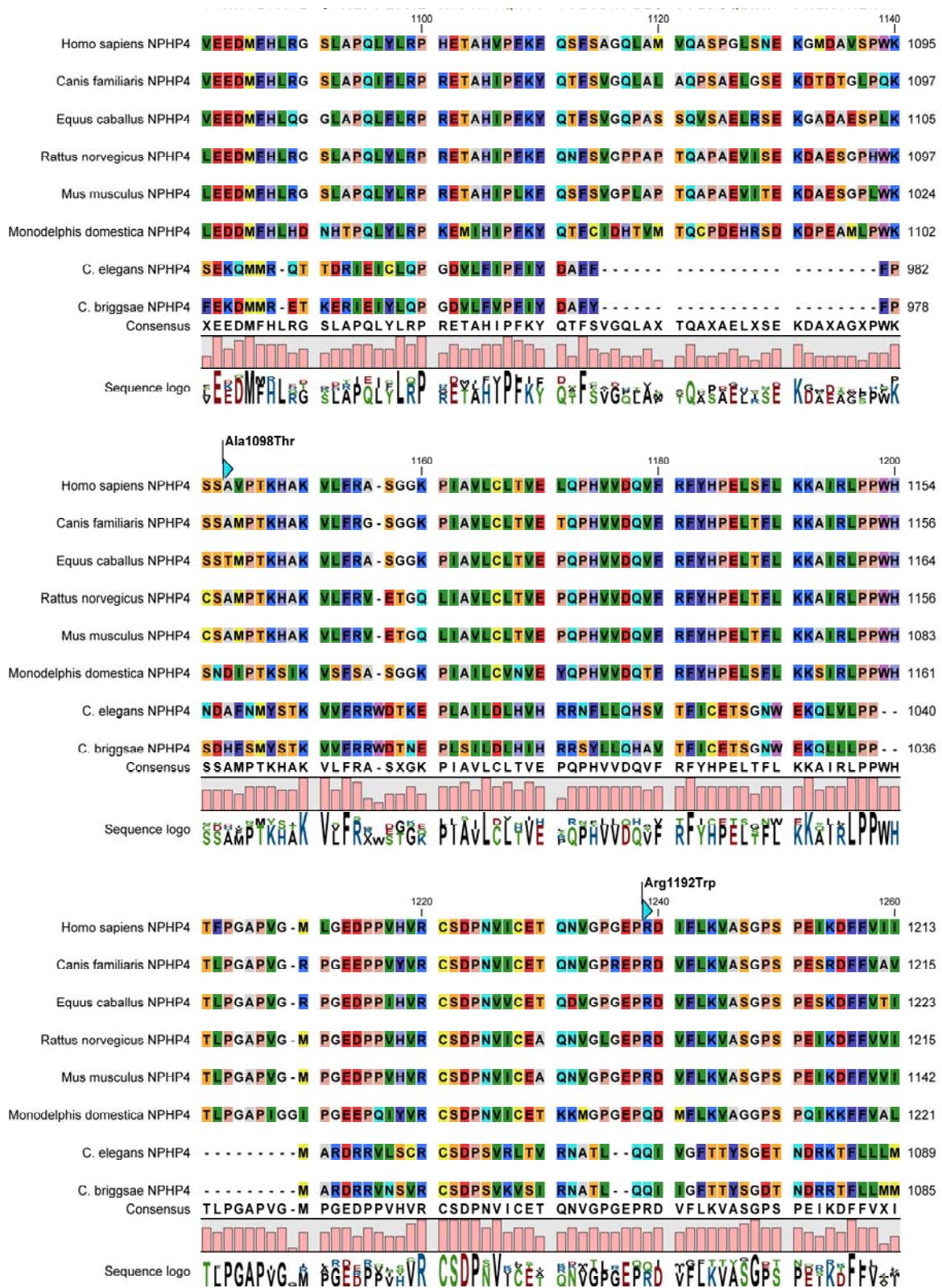


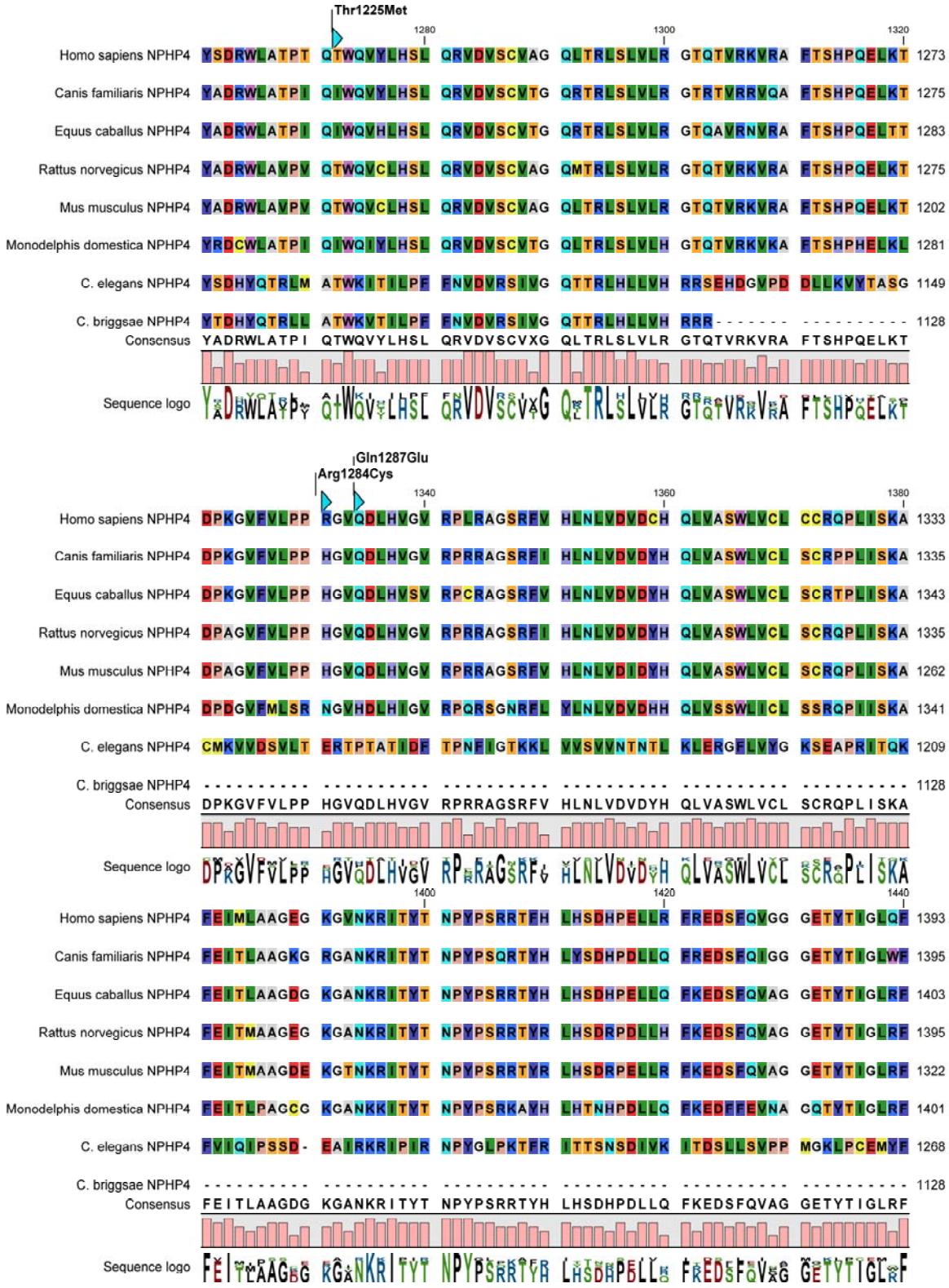








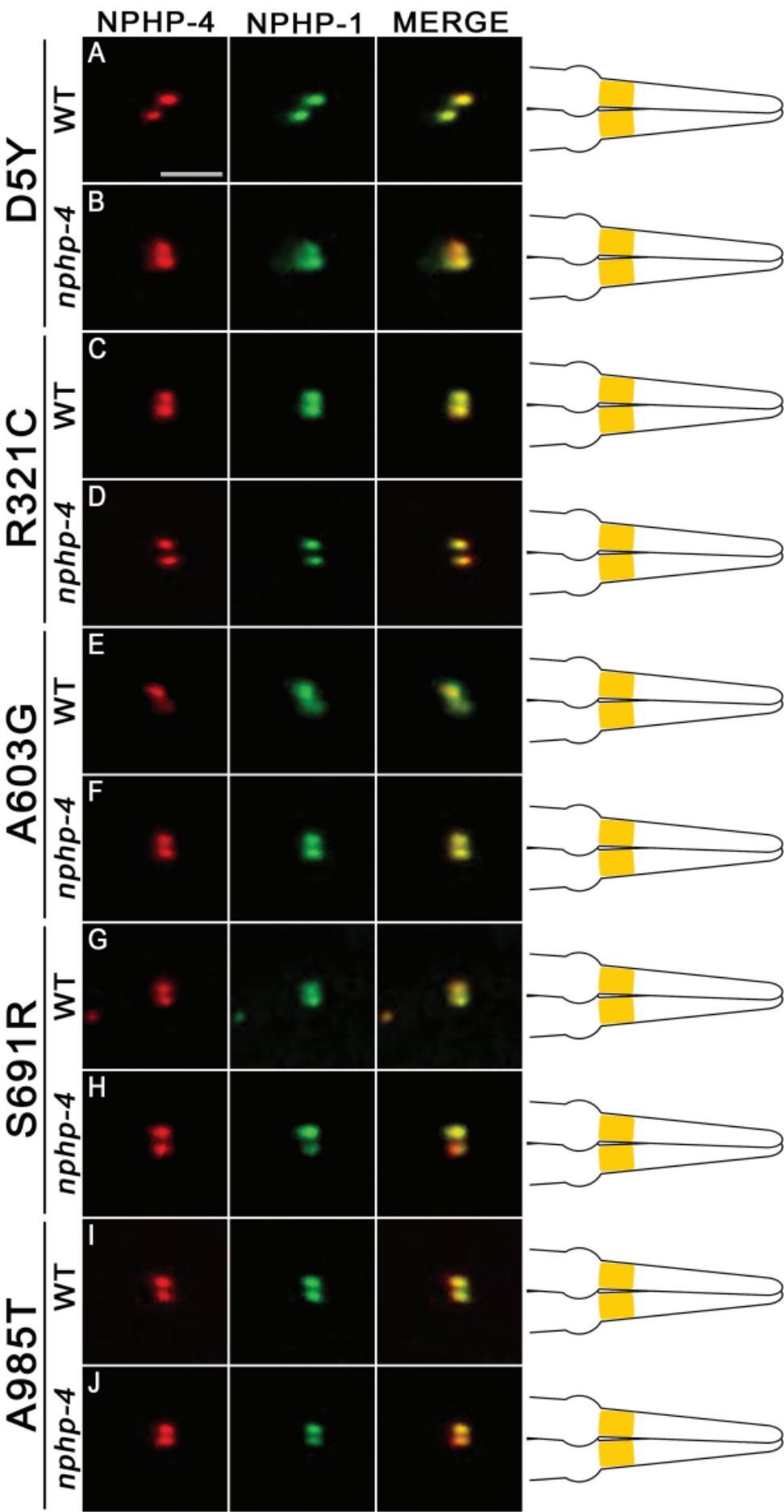




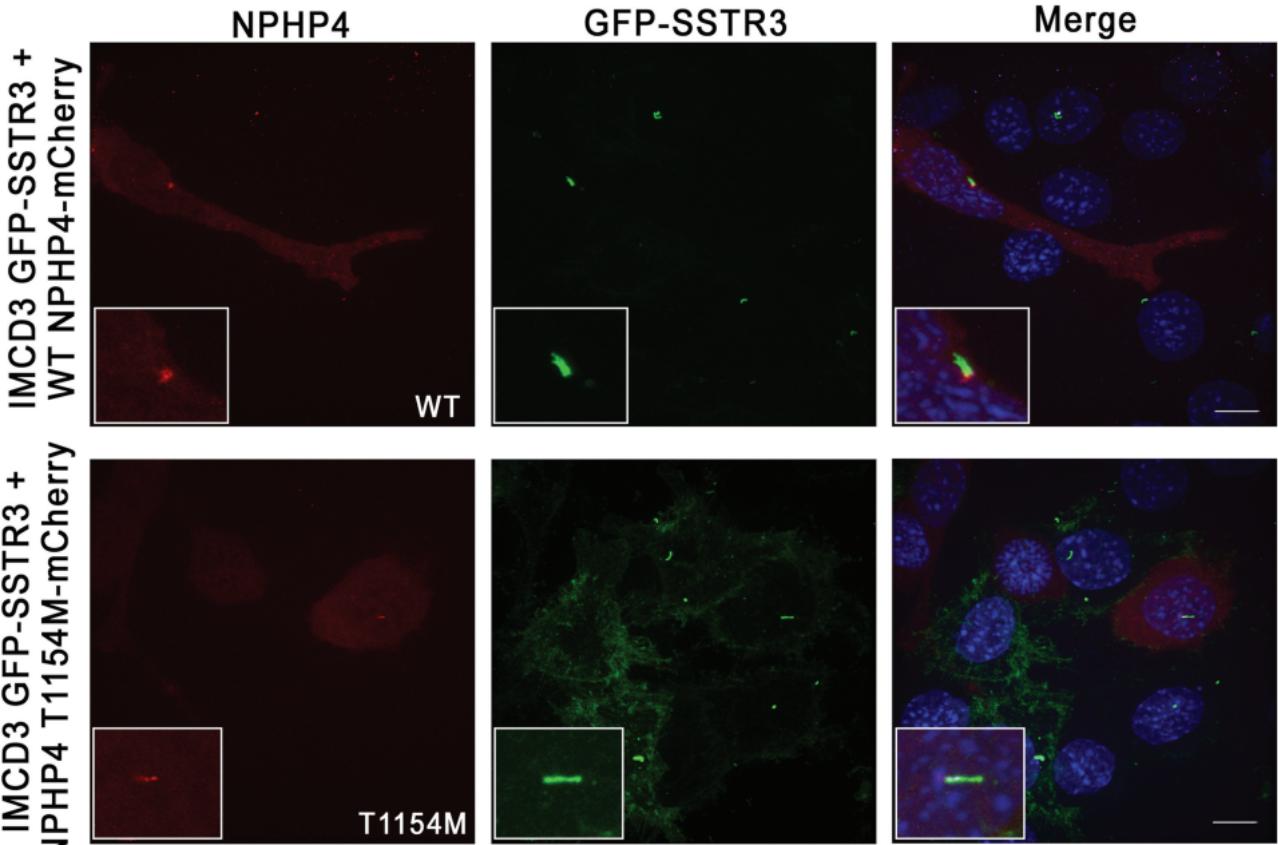
1460

Homo sapiens NPHP4	APSQRVGEE-	EIL_YINDHE DK-NEEAFCV KV_VYQ	- - 1426
Canis familiaris NPHP4	APRQSPGEE-	EIL_YINDHE DK-NEEAFCV KV_VYQ	- - 1428
Equus caballus NPHP4	APSQRAGEE-	EV_LY_INDHE DK-NEETFCV KV_VYQ	- - 1436
Rattus norvegicus NPHP4	LPSGSAGQE-	EIL_IY_INDQD DK-NEETFCV KV_VYQ	- - 1428
Mus musculus NPHP4	LPSGSAGQE-	EIL_IY_INDHE DK-NEETFCV KV_VYQ	- - 1355
Monodelphis domestica NPHP4	APSHSMGME-	EV_LY_INDHE DK-NEETFCV KV_VYQ	- - 1434
C. elegans NPHP4	VKNTHLQKNI ET_LY_ISDAE TYVQEEAYSJ TIAFEAS		1305
C. briggsae NPHP4	- - - - -	- - - - -	1128
Consensus	APSQSAGEE-	EIL_IY_INDHE DK-NEETFCV KVXYQ	- -
Sequence logo			

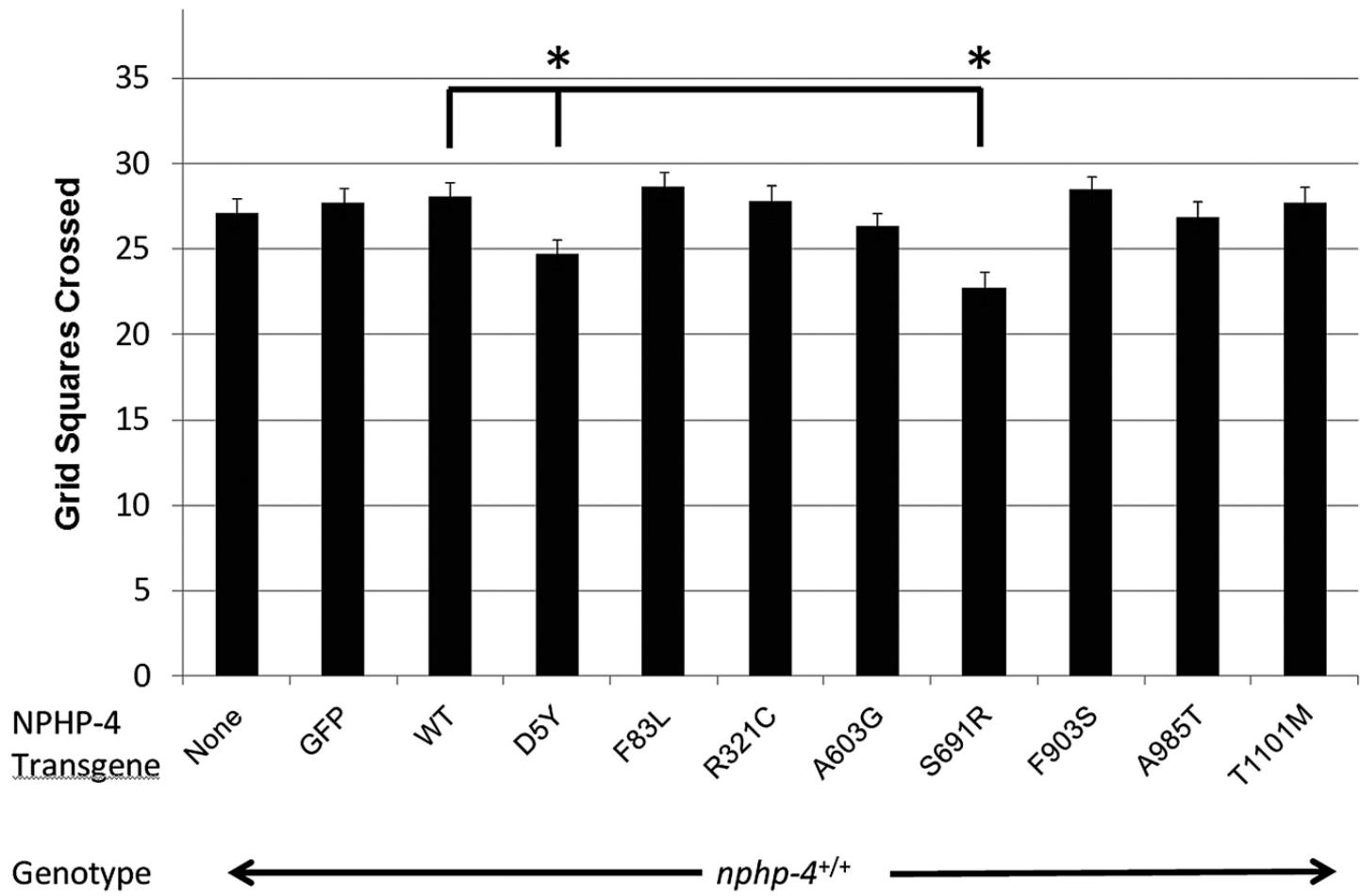
Supplemental Figure 2



Supplemental Figure 3



Supplemental Figure 4



Supplemental Figure 5

NPHP-4		Genotype	Head		Tail		p Head	p Tail
Transgene			non Dyf	Dyf	non Dyf	Dyf		
WT	<i>wt</i>		100	0	97	3	-	-
None	<i>wt</i>		100	0	100	0		
D5Y	<i>wt</i>		100	0	98	2		
F83L	<i>wt</i>		100	0	96	4		
R321C	<i>wt</i>		100	0	97	3		
A603G	<i>wt</i>		100	0	98	2		
S691R	<i>wt</i>		100	0	99	1		
F903S	<i>wt</i>		100	0	98	2		
A985T	<i>wt</i>		100	0	98	2		
T1101M	<i>wt</i>		100	0	97	3		