

Apicomplexan CDK subfamily vs. eukaryotic CDC2

**Intermediate**

1	XXXVERLGGGTYGDVYKAV	E	YYY	23*
24	---EKLGGGTYGDVYKGVikynnnnnndlyqntnylpy	D	YYT	64
24	---EKLGGGTYGDVYKGVikynnnnnndlyqntnylpy	D	YYT	63
24	---EKLGGGTYGDVYKGVikysnssndlyqntnylpy	D	YYT	63
24	---EKLGGGTYGDVYKGV	V	VKY	42
24	---EKLGGGTYGDVYKGV	V	VKY	42
24	---EKLGGGTYGDVYKGV	V	VKY	42
131	-----	---	---	42
131	-----	---	---	---
127	-----	---	---	---
34	---VERLGGGTYGDVYKAV	E	EeeeeendrgsarardrpgistaeataeatngedasakegsekKTK	95
34	---VERLGGGTYGDVYKAV	E	EeeeeendrgsarardrpgistaeataeatngedasakegsekKTK	95
34	---VERLGGGTYGDVYKAV	E	EeeeeendrgsarardrpgistaeataeatngedasakegsekKTK	95
34	---VERLGGGTYGDVYKAV	E	EEDeenqrgassslsasrdgasdgggrnveetpekegea	90
34	---VERLGGGTYGDVYRAV	E	EPedgvgg	58

position . 10 . 20

**Background**

1	XXXVERLGGGTYGDVYKAV	E	YYY	23*
24	---EKLGGGTYGDVYKGVikynnnnnndlyqntnylpy	D	YYT	64
24	---EKLGGGTYGDVYKGVikynnnnnndlyqntnylpy	D	YYT	63
24	---EKLGGGTYGDVYKGVikysnssndlyqntnylpy	D	YYT	63
24	---EKLGGGTYGDVYKGV	V	VKY	42
24	---EKLGGGTYGDVYKGV	V	VKY	42
24	---EKLGGGTYGDVYKGV	V	VKY	42
131	-----	---	---	42
131	-----	---	---	---
127	-----	---	---	---
34	---VERLGGGTYGDVYKAV	E	EeeeeendrgsarardrpgistaeataeatngedasakegsekKTK	95
34	---VERLGGGTYGDVYKAV	E	EeeeeendrgsarardrpgistaeataeatngedasakegsekKTK	95
34	---VERLGGGTYGDVYKAV	E	EeeeeendrgsarardrpgistaeataeatngedasakegsekKTK	95
34	---VERLGGGTYGDVYKAV	E	EEDeenqrgassslsasrdgasdgggrnveetpekegea	90
34	---VERLGGGTYGDVYRAV	E	EPedgvgg	58

**foreground (63):**

Y	E	K	I	E	V	G	E	T	Y	G	V	Y	K	A	V	Q	N	K	Q	T
F	T	L	L	S	S	E	I	E	R	G	T						D	T	E	
I				A	K	C	R										R			

**wt\_res\_freqs (23):**

6	1	3	2	3	4	1	8	5	5	7	9	2	8	5	5	1	1	2	2	5
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

**insertions** 1 3  
**deletions** 9 766

position . 10 . 20

**Foreground**

1	XXXVERLGGGTYGDVYKAV	E	YYY	23*
24	---EKLGGGTYGDVYKGVikynnnnnndlyqntnylpy	D	YYT	64
24	---EKLGGGTYGDVYKGVikynnnnnndlyqntnylpy	D	YYT	63
24	---EKLGGGTYGDVYKGVikysnssndlyqntnylpy	D	YYT	63
24	---EKLGGGTYGDVYKGV	V	VKY	42
24	---EKLGGGTYGDVYKGV	V	VKY	42
24	---EKLGGGTYGDVYKGV	V	VKY	42
131	-----	---	---	42
131	-----	---	---	---
127	-----	---	---	---
34	---VERLGGGTYGDVYKAV	E	EeeeeendrgsarardrpgistaeataeatngedasakegsekKTK	95
34	---VERLGGGTYGDVYKAV	E	EeeeeendrgsarardrpgistaeataeatngedasakegsekKTK	95
34	---VERLGGGTYGDVYKAV	E	EeeeeendrgsarardrpgistaeataeatngedasakegsekKTK	95
34	---VERLGGGTYGDVYKAV	E	EEDeenqrgassslsasrdgasdgggrnveetpekegea	90
34	---VERLGGGTYGDVYRAV	E	EPedgvgg	58

**foreground (15):**

V	E	K	L	G	G	T	Y	G	D	V	Y	K	G	K			D	E	T
R																	V	P	
																	E	Y	

**wt\_res\_freqs (3):**

3	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	3	3
3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

**insertions** 2  
**deletions** 2 222

position . 10 . 20


















**Intermediate**

unknown	279	ALSHQWF	285*
unknown	493	ALSHPWTF	499
unknown	526	ALSHPWTF	532
unknown	587	ALSHPWTF	593
unknown	494	ALSHPWTF	500
unknown	502	ALSHPWTF	508
unknown	509	ALSHPWTF	515
unknown	451	ALSHRWTF	457
unknown	402	ALSHKWF	408
unknown	464	ALSHPWTF	470
unknown	446	ALSHQWF	452
unknown	446	ALSHQWF	452
unknown	446	ALSHQWF	452
unknown	451	ALSHQWF	457
unknown	339	-----	

**position** .

**Background**

consensus	279	ALSHQWF	285*
PFF0750w	493	ALSHPWTF	499
PKH_113350	526	ALSHPWTF	532
PVX_113910	587	ALSHPWTF	593
PBANKA_123020	494	ALSHPWTF	500
PY06538	502	ALSHPWTF	508
PCHAS_123090	509	ALSHPWTF	515
TA09960	451	ALSHRWTF	457
TP04_0791	402	ALSHKWF	408
BBOV_III008880	464	ALSHPWTF	470
TGGT1_118720	446	ALSHQWF	452
TGME49_029020	446	ALSHQWF	452
TGVEG_026470	446	ALSHQWF	452
NCLIV_030060	451	ALSHQWF	457
ETH_00023650	339	-----	

**foreground (63):** ALSHNPWF 6.0  
L QD FL  
K Y

**wt\_res\_freqs (23):** 7816616  
1 11 21  
1 4

**insertions**  
**deletions** 6667111 9.1

**Foreground**

consensus	279	ALSHQWF	285*
PFF0750w	493	ALSHPWTF	499
PKH_113350	526	ALSHPWTF	532
PVX_113910	587	ALSHPWTF	593
PBANKA_123020	494	ALSHPWTF	500
PY06538	502	ALSHPWTF	508
PCHAS_123090	509	ALSHPWTF	515
TA09960	451	ALSHRWTF	457
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TGGT1_118720	446	ALSHQWF	452
TGME49_029020	446	ALSHQWF	452
TGVEG_026470	446	ALSHQWF	452
NCLIV_030060	451	ALSHQWF	457
ETH_00023650	339	-----	

**foreground (15):** ALSHNPWF 0.9  
P

**wt\_res\_freqs (3):** 8888288  
4

**insertions**  
**deletions** 6666666 2.3

**position** .