

Supplementary Table 10

<i>P. knowlesi</i> protein identifiers	Match type	Host protein identifiers	Match Length	Match start*	Match end*	Match sequence	BLAST e-values	
PKH_080655	KIR to CD99	<i>Cercopithecus aethiops</i>	O02788_CERA	22	36	57	ATPKKPSAGDDFDLGDVAVDGG	4.3e-06
PKH_051350	"	"	O02788_CERA	21	38	58	PKKPSAGDDFDLGDVAVDGGN	8.9e-06
PKH_082320	"	"	O02788_CERA	21	38	58	PKKPSAGDDFDLGDVAVDGGN	8.9e-06
PKH_081600	"	"	O02788_CERA	18	70	87	KPNPNPQAGSSGSFSDA	5.6e-04
PKH_112420	"	"	O02788_CERA	16	70	85	KPNPNPQAGSSGSFSDA	7.6e-03
PKH_114580	"	"	O02788_CERA	15	93	107	VSGGEGKGGSDGGGS	5.1e-02
PKH_080655	"	<i>M. mulatta</i>	ENSMMUP00000024593	22	20	41	ATPKKPSAGDDFDLGDVAVDGG	2.9e-08
PKH_082320	"	"	ENSMMUP00000024593	22	22	43	PKKPSAGDDFDLGDVAVDGGNE	1.8e-08
PKH_051350	"	"	ENSMMUP00000024593	21	22	42	PKKPSAGDDFDLGDVAVDGGN	6.1e-08
PKH_081600	"	"	ENSMMUP00000024593	18	56	73	KPNPNPQAGSSGSFSDA	3.8e-06
PKH_114580	"	"	ENSMMUP00000024593	17	79	95	VSGGEGKGGSDGGGSHR	1.2e-05
PKH_112420	"	"	ENSMMUP00000024593	16	56	71	KPNPNPQAGSSGSFSDA	6.2e-05
PKH_031990	"	"	ENSMMUP00000024593	15	86	100	GGSDGGGSHRKEGEE	1.8e-04
PKH_051350	"	<i>Human</i>	Q6ICV7_HUMAN	19	44	62	PKKPSAGDDFDLGDVAVDG	2.3e-04
PKH_080655	"	"	Q6ICV7_HUMAN	19	44	62	PKKPSAGDDFDLGDVAVDG	2.3e-04
PKH_082320	"	"	Q6ICV7_HUMAN	19	44	62	PKKPSAGDDFDLGDVAVDG	2.3e-04
PKH_114580	"	"	Q6ICV7_HUMAN	17	99	115	VSGGEGKGGSDGGGSHR	2.6e-03
PKH_031990	"	"	Q6ICV7_HUMAN	15	106	120	GGSDGGGSHRKEGEE	3.7e-02
PKH_051350	KIR to AHNK	<i>M. mulatta</i>	ENSMMUP00000037351	33	2181	2213	LPKADIDVSGPKVDIDVPDNIPEGKLGPK	3.4e-12
"	"	"	ENSMMUP00000037351	25	3091	3115	LPKADIDVSGPKVDIDVPDNIPEG	1.2e-07
"	"	"	ENSMMUP00000037351	21	2975	2995	VDIDVPDNIPEGKLGPK	1.3e-05
"	"	"	ENSMMUP00000037351	19	2767	2785	DVSGPKVDIDVPDNIPEG	1.9e-04
"	"	"	ENSMMUP00000037351	19	3353	3371	DVSGPKVDIDVPDNIPEG	1.9e-04
"	"	"	ENSMMUP00000037351	18	2107	2124	LKGPVKGDVDSLPKVE	2.2e-03
"	"	"	ENSMMUP00000037351	18	1723	1740	LKGPVKGDVDSLPKVE	2.2e-03
"	"	"	ENSMMUP00000037351	18	1851	1868	LKGPVKGDVDSLPKVE	2.2e-03
"	"	"	ENSMMUP00000037351	18	2235	2252	LKGPVKGDVDSLPKVE	2.2e-03
"	"	"	ENSMMUP00000037351	18	2889	2906	LKGPVKGDVDSLPKVE	2.2e-03
"	"	"	ENSMMUP00000037351	18	3273	3290	LKGPVKGDVDSLPKVE	2.2e-03
"	"	"	ENSMMUP00000037351	18	3401	3418	LKGPVKGDVDSLPKVE	2.2e-03
"	"	"	ENSMMUP00000037351	18	3865	3882	LKGPVKGDVDSLPKVE	2.2e-03
"	"	"	ENSMMUP00000037351	17	436	452	VPDNIPEGKLGPK	1.7e-03
"	"	"	ENSMMUP00000037351	16	1814	1829	PDVNIPEGKLGPK	4.5e-03
"	"	"	ENSMMUP00000037351	16	2687	2702	LKGPVKGDVDSLPK	1.9e-02
"	"	"	ENSMMUP00000037351	16	3145	3160	LKGPVKGDVDSLPK	1.9e-02
"	"	"	ENSMMUP00000037351	16	3219	3234	LPKADIDVSGPKVDID	1.9e-02
"	"	"	ENSMMUP00000037351	16	3817	3832	DVSGPKVDIDVPDNI	0.36
"	"	"	ENSMMUP00000037351	15	1797	1811	LPKADIDVSGPKVDI	8.4e-02
"	"	"	ENSMMUP00000037351	15	1669	1683	LPKADIDVSGPKVDI	8.4e-02
"	"	"	ENSMMUP00000037351	15	2053	2067	LPKADIDVSGPKVDI	8.4e-02
PKH_051350	"	<i>Human</i>	Q6ZQN2_HUMAN	19	225	243	DVSGPKVDIDVPDNIPEG	1.0e-02
"	"	"	Q6ZQN2_HUMAN	18	273	290	LKGPVKGDVDSLPKVE	0.12
"	"	"	Q6ZQN2_HUMAN	18	401	418	LKGPVKGDVDSLPKVE	0.12
"	"	"	Q6ZQN2_HUMAN	18	475	492	LKGPVKGDVDSLPKVE	0.12
"	"	"	Q6ZQN2_HUMAN	16	438	453	PDVNIPEGKLGPK	0.24
"	"	"	Q6ZQN2_HUMAN	16	17	32	LKGPVKGDVDSLPK	1.1
"	"	"	Q6ZQN2_HUMAN	16	91	106	LPKADIDVSGPKVDID	1.1
"	"	"	Q13727_HUMAN	19	106	124	DVSGPKVDIDVPDNIPEG	2.5e-03
"	"	"	Q13727_HUMAN	18	154	171	LKGPVKGDVDSLPKVE	3e-02
"	"	"	Q13727_HUMAN	18	282	299	LKGPVKGDVDSLPKVE	3e-02
"	"	"	Q13727_HUMAN	18	356	373	LKGPVKGDVDSLPKVE	3e-02
"	"	"	Q13727_HUMAN	16	319	334	PDVNIPEGKLGPK	6.3e-02
"	"	"	Q8N274_HUMAN	18	677	694	LKGPVKGDVDSLPKVE	4.9e-02
"	"	"	Q8N274_HUMAN	16	215	230	LKGPVKGDVDSLPK	0.45
"	"	"	Q8N274_HUMAN	16	640	655	PDVNIPEGKLGPK	0.10
"	"	"	Q8N274_HUMAN	16	768	783	PDVNIPEGKLGPK	0.10
"	"	"	Q8N274_HUMAN	15	751	765	LPKADIDVSGPKVDI	2.0
"	"	"	AHNK_HUMAN (Q09666)	27	3834	3860	DVSGPKVDIDVPDNIPEGKLGPK	1.0e-06
"	"	"	AHNK_HUMAN (Q09666)	27	3052	3078	DVSGPKVDIDVPDNIPEGKLGPK	1.0e-06
"	"	"	AHNK_HUMAN (Q09666)	19	4218	4236	DVSGPKVDIDVPDNIPEG	3.7e-02
"	"	"	AHNK_HUMAN (Q09666)	18	2588	2605	LKGPVKGDVDSLPKVE	0.42
"	"	"	AHNK_HUMAN (Q09666)	18	2716	2733	LKGPVKGDVDSLPKVE	0.42
"	"	"	AHNK_HUMAN (Q09666)	18	4266	4283	LKGPVKGDVDSLPKVE	0.42
"	"	"	AHNK_HUMAN (Q09666)	18	4394	4411	LKGPVKGDVDSLPKVE	0.42
"	"	"	AHNK_HUMAN (Q09666)	18	4468	4485	LKGPVKGDVDSLPKVE	0.42
"	"	"	AHNK_HUMAN (Q09666)	17	917	933	VPDNIPEGKLGPK	0.33
"	"	"	AHNK_HUMAN (Q09666)	16	2126	2141	LKGPVKGDVDSLPK	3.8

"	"	"	AHNK_HUMAN (Q09666)	16	2679	2694	PDVNIPEGKLGPK	0.88
"	"	"	AHNK_HUMAN (Q09666)	16	2935	2950	PDVNIPEGKLGPK	0.88
"	"	"	AHNK_HUMAN (Q09666)	16	3754	3769	LKGPVKVGDVDSLPG	3.8
"	"	"	AHNK_HUMAN (Q09666)	16	2551	2566	PDVNIPEGKLGPK	0.88
"	"	"	AHNK_HUMAN (Q09666)	16	4010	4025	LKGPVKVGDVDSLPG	3.8
"	"	"	AHNK_HUMAN (Q09666)	16	4084	4099	LPKADIVSGPKVDI	3.8
"	"	"	AHNK_HUMAN (Q09666)	16	4431	4446	PDVNIPEGKLGPK	0.88
PKH_101170	"	M. mulatta	ENSMMUP00000037351	23	3355	3377	SGPKVDIVPDNIEGPDALKG	3.4e-05
"	"	"	ENSMMUP00000037351	23	3099	3121	SGPKVDIVPDNIEGPDALKG	3.4e-05
"	"	"	ENSMMUP00000037351	23	2769	2791	SGPKVDIVPDNIEGPDALKG	3.4e-05
"	"	"	ENSMMUP00000037351	17	2189	2205	SGPKVDIVPDVNIIEGP	2.2e-03
"	"	"	ENSMMUP00000037351	16	3954	3969	DVPDNIIEGPDALKG	9.3e-03
PKH_101170	"	Human	Q6ZQN2_HUMAN	23	227	249	SGPKVDIVPDVNIIEGPDALKG	7.5e-05
"	"	"	Q6ZQN2_HUMAN	16	698	713	DVPDNIIEGPDALKG	0.51
"	"	"	Q13727_HUMAN	23	108	130	SGPKVDIVPDVNIIEGPDALKG	1.8e-05
"	"	"	AHNK_HUMAN (Q09666)	23	4220	4242	SGPKVDIVPDVNIIEGPDALKG	2.8e-04
"	"	"	AHNK_HUMAN (Q09666)	17	3054	3070	SGPKVDIVPDVNIIEGP	0.42
"	"	"	AHNK_HUMAN (Q09666)	17	3836	3852	SGPKVDIVPDVNIIEGP	0.42
"	"	"	AHNK_HUMAN (Q09666)	16	3189	3204	DVPDNIIEGPDALKG	1.8
"	"	"	AHNK_HUMAN (Q09666)	16	4691	4706	DVPDNIIEGPDALKG	1.8
"	"	"	AHNK_HUMAN (Q09666)	16	3971	3986	DVPDNIIEGPDALKG	1.8
"	"	"	AHNK_HUMAN (Q09666)	16	3641	3656	DVPDNIIEGPDALKG	1.8
"	"	"	AHNK_HUMAN (Q09666)	15	1422	1436	VPDNIIEGPDALKG	7.9

PKH_062020	SICavar-like to AHNK	M. mulatta	ENSMMUP00000037351	33	1729	1761	KGDVDSLPGVEGLKGPVEDIKGPVDIDAPD	4.3e-12
"	"	"	ENSMMUP00000037351	33	1857	1889	KGDVDSLPGVEGLKGPVEDIKGPVDIDAPD	4.3e-12
"	"	"	ENSMMUP00000037351	33	3091	3123	LPKADIVSGPKVDIVPDVNIIEGPDALKGPK	4.3e-12
"	"	"	ENSMMUP00000037351	33	3871	3903	KGDVDSLPGVEGLKGPVEDIKGPVDIDAPD	4.3e-12
"	"	"	ENSMMUP00000037351	30	2113	2142	KGDVDSLPGVEGLKGPVEDIKGPVDI	2.7e-10
"	"	"	ENSMMUP00000037351	29	2895	2923	KGDVDSLPGVEGLKGPVEDIKGPVDI	1.2e-09
"	"	"	ENSMMUP00000037351	28	3279	3306	KGDVDSLPGVEGLKGPVEDIKGPVDI	3.1e-09
"	"	"	ENSMMUP00000037351	27	2767	2793	DVSGPKVDIVPDVNIIEGPDALKGPK	6.5e-09
"	"	"	ENSMMUP00000037351	27	3353	3379	DVSGPKVDIVPDVNIIEGPDALKGPK	6.5e-09
"	"	"	ENSMMUP00000037351	25	2181	2205	LPKADIVSGPKVDIVPDVNIIEGP	1.2e-07
"	"	"	ENSMMUP00000037351	23	3407	3429	KGDVDSLPGVEGLKGPVEDIK	2.9e-06
"	"	"	ENSMMUP00000037351	19	2832	2850	EGDLKGPVEDIKGPVDI	1.9e-04
"	"	"	ENSMMUP00000037351	18	2704	2721	EGDLKGPVEDIKGPVDI	8.1e-04
"	"	"	ENSMMUP00000037351	18	3954	3971	DVPDNIIEGPDALKGPK	5.0e-04
"	"	"	ENSMMUP00000037351	16	2815	2830	LKGPVKMGDVSLSLPG	1.5e-02
"	"	"	ENSMMUP00000037351	17	1067	1083	DVDSLPGVEGLKGPVE	4.5e-03
"	"	"	ENSMMUP00000037351	16	3168	3183	PEVDIKGPVDIDAPD	7.3e-03
"	"	"	ENSMMUP00000037351	16	3219	3234	LPKADIVSGPKVDI	1.9e-02
"	"	"	ENSMMUP00000037351	16	3749	3764	SLPVEGLKGPVEDI	1.9e-02
"	"	"	ENSMMUP00000037351	16	3817	3832	DVSGPKVDIVPDVNI	1.5e-02
"	"	"	ENSMMUP00000037351	15	1669	1683	LPKADIVSGPKVDI	8.4e-02
"	"	"	ENSMMUP00000037351	15	1797	1811	LPKADIVSGPKVDI	8.4e-02
"	"	"	ENSMMUP00000037351	15	2053	2067	LPKADIVSGPKVDI	8.4e-02
"	"	Human	Q6ZQN2_HUMAN	36	145	180	LKGPVKMGDVSLSLPGVEGLKGPVEDIKGPVDI	5.6e-12
"	"	"	Q6ZQN2_HUMAN	33	279	311	KGDVDSLPGVEGLKGPVEDIKGPVDIDAPD	2.2e-10
"	"	"	Q6ZQN2_HUMAN	27	225	251	DVSGPKVDIVPDVNIIEGPDALKGPK	3.4e-07
"	"	"	Q6ZQN2_HUMAN	19	407	425	KGDVDSLPGVEGLKGPVE	1.6e-02
"	"	"	Q6ZQN2_HUMAN	18	698	715	DVPDNIIEGPDALKGPK	2.7e-02
"	"	"	Q6ZQN2_HUMAN	16	621	636	SLPVEGLKGPVEDI	1.1
"	"	"	Q6ZQN2_HUMAN	16	91	106	LPKADIVSGPKVDI	1.1
"	"	"	Q6ZQN2_HUMAN	16	40	55	PEVDIKGPVDIDAPD	0.4
"	"	"	Q6ZQN2_HUMAN	16	828	843	PDVNIIEGPDALKGPK	0.31
"	"	"	Q13727_HUMAN	33	160	192	KGDVDSLPGVEGLKGPVEDIKGPVDIDAPD	4.5e-11
"	"	"	Q13727_HUMAN	27	26	52	LKGPVKMGDVSLSLPGVEGLKGPVE	1.3e-07
"	"	"	Q13727_HUMAN	27	106	132	DVSGPKVDIVPDVNIIEGPDALKGPK	7.7e-08
"	"	"	Q13727_HUMAN	19	288	306	KGDVDSLPGVEGLKGPVE	4.1e-03
"	"	"	Q13727_HUMAN	16	502	517	SLPVEGLKGPVEDI	0.28
"	"	"	Q8N274_HUMAN	29	683	711	KGDVDSLPGVEGLKGPVEDIKGPVDI	2.4e-08
"	"	"	Q8N274_HUMAN	15	751	765	LPKADIVSGPKVDI	2.0
"	"	"	AHNK_HUMAN (Q09666)	36	4138	4173	LKGPVKMGDVSLSLPGVEGLKGPVEDIKGPVDI	2.2e-11
"	"	"	AHNK_HUMAN (Q09666)	33	2722	2754	KGDVDSLPGVEGLKGPVEDIKGPVDIDAPD	8.5e-10
"	"	"	AHNK_HUMAN (Q09666)	33	4272	4304	KGDVDSLPGVEGLKGPVEDIKGPVDIDAPD	8.5e-10
"	"	"	AHNK_HUMAN (Q09666)	29	2594	2622	KGDVDSLPGVEGLKGPVEDIKGPVDI	2.3e-07
"	"	"	AHNK_HUMAN (Q09666)	27	4218	4244	DVSGPKVDIVPDVNIIEGPDALKGPK	1.3e-06
"	"	"	AHNK_HUMAN (Q09666)	25	3691	3715	VSLPGVEGLKGPVEDIKGPVDI	3.9e-05
"	"	"	AHNK_HUMAN (Q09666)	19	3052	3070	DVSGPKVDIVPDVNIIEGP	3.7e-02
"	"	"	AHNK_HUMAN (Q09666)	19	3834	3852	DVSGPKVDIVPDVNIIEGP	3.7e-02
"	"	"	AHNK_HUMAN (Q09666)	19	4400	4418	KGDVDSLPGVEGLKGPVE	6.0e-02

"	"	AHNK_HUMAN (Q09666)	18	3189	3206	DVPDVNIEGPDALKKGP	9.7e-02
"	"	AHNK_HUMAN (Q09666)	18	3569	3586	EGDLKGPEVDIKGPKVDI	0.16
"	"	AHNK_HUMAN (Q09666)	18	3641	3658	DVPDVNIEGPDALKKGP	9.7e-02
"	"	AHNK_HUMAN (Q09666)	18	3771	3788	EGDLKGPEVDIKGPKVDI	0.16
"	"	AHNK_HUMAN (Q09666)	18	3971	3988	DVPDVNIEGPDALKKGP	9.7e-02
"	"	AHNK_HUMAN (Q09666)	18	4691	4708	DVPDVNIEGPDALKKGP	9.7e-02
"	"	AHNK_HUMAN (Q09666)	17	1596	1612	DVDVSLPKVEGDLKGPE	0.88
"	"	AHNK_HUMAN (Q09666)	17	1422	1438	VPDVNIEGPDALKGPE	0.42
"	"	AHNK_HUMAN (Q09666)	16	2984	2999	SLPKVEGDLKGPEVDI	3.8
"	"	AHNK_HUMAN (Q09666)	16	4033	4048	PEVDIKGPKVDIDAPD	1.4
"	"	AHNK_HUMAN (Q09666)	16	4084	4099	LPKADIDVSGPKVDID	3.8
"	"	AHNK_HUMAN (Q09666)	16	4614	4629	SLPKVEGDLKGPEVDI	3.8
"	"	AHNK_HUMAN (Q09666)	16	4802	4817	VSLPKADIDVSGPKVD	6.2
"	"	AHNK_HUMAN (Q09666)	16	4821	4836	PDVNIEGPDALKKGP	1.1

Supplementary Table 10. Host matches in *P. knowlesi* variant proteins with those of African green monkey, macaque and human.

* Match start and end coordinates are given for the match region on the protein hit.
 Blast e values are quoted for the exact match region against UniProt (release 12.6).
 For ENSMMUP0000024593 and ENSMMUP0000037351 Blast e values are quoted for the exact match region against the Ensembl database (release 48).
 A minimum identical match of 15 amino acids long was used.

O02788_CERA = CD99-cos7 (Fragment)
 ENSMMUP0000024593= CD99
 Q6ICV7= CD99 protein (Fragment)

Q8N274_HUMAN= FLJ33834 fis clone CTON2004264, moderately similar to neuroblast differentiation associated protein.
 Q13727= AHNK-related protein
 Q6ZQN2_HUMAN= FLJ46846 fis, clone UTERU3004635, moderately similar to neuroblast differentiation associated protein AHNK (Fragment)
 AHNK_HUMAN= Neuroblast differentiation-associated protein AHNK (Desmoyokin)(Fragments)
 ESMMUP0000037351= AHNK