

<i>Homo sapiens</i> ADIA	10	20	30	40	50	60
<i>Homo sapiens</i> ADIA						
<i>Papio hamadryas</i> ADIA						
<i>Mus musculus</i> Adia						
<i>Rattus norvegicus</i> Adia						
<i>Cavia porcellus</i> ADIA						
<i>Ochotona princeps</i> ADIA						
<i>Bos taurus</i> ADIA						
<i>Equus caballus</i> ADIA						
<i>Canis lupus familiaris</i> ADIA						
<i>Felis catus</i> ADIA						
<i>Myotis lucifugus</i> ADIA						
<i>Dasyopus novemcinctus</i> ADIA						
<i>Loxodonta africana</i> ADIA						
<i>Homo sapiens</i> ADIB						
<i>Pan troglodytes</i> ADIB						
<i>Pongo abelii</i> ADIB						
<i>Nomascus leucogenys</i> ADIB						
<i>Callithrix jacchus</i> ADIB						
<i>Otolemur garnettii</i> ADIB						
<i>Mus musculus</i> Adib						
<i>Rattus norvegicus</i> Adib						
<i>Cavia porcellus</i> ADIB						
<i>Oryctolagus cuniculus</i> ADIB						
<i>Bos taurus</i> ADIB						
<i>Equus caballus</i> ADIB						
<i>Canis lupus familiaris</i> ADIB						
<i>Myotis lucifugus</i> ADIB						
<i>Loxodonta africana</i> ADIB						
<i>Homo sapiens</i> ADIC						
<i>Macaca mulatta</i> ADIC						
<i>Papio hamadryas</i> ADIC						
<i>Callithrix jacchus</i> ADIC						
<i>Mus musculus</i> Adic						
<i>Rattus norvegicus</i> Adic						
<i>Cavia porcellus</i> ADIC						
<i>Oryctolagus cuniculus</i> ADIC						
<i>Equus caballus</i> ADIC						
<i>Canis lupus familiaris</i> ADIC						
<i>Myotis lucifugus</i> ADIC						
<i>Loxodonta africana</i> ADIC						
<i>Homo sapiens</i> ADID						
<i>Pan troglodytes</i> ADID						
<i>Pongo abelii</i> ADID						
<i>Nomascus leucogenys</i> ADID						
<i>Macaca mulatta</i> ADID						
<i>Otolemur garnettii</i> ADID						
<i>Mus musculus</i> Adid						
<i>Rattus norvegicus</i> Adid						
<i>Cavia porcellus</i> ADID						
<i>Oryctolagus cuniculus</i> ADID						
<i>Bos taurus</i> ADID						
<i>Equus caballus</i> ADID	1					MG 2
<i>Canis lupus familiaris</i> ADID						
<i>Felis catus</i> ADID						
<i>Myotis lucifugus</i> ADID						
<i>Dasyopus novemcinctus</i> ADID						
<i>Loxodonta africana</i> ADID						
<i>Homo sapiens</i> ADIE						
<i>Pan troglodytes</i> ADIE						
<i>Pongo abelii</i> ADIE						
<i>Papio hamadryas</i> ADIE						
<i>Callithrix jacchus</i> ADIE						
<i>Otolemur garnettii</i> ADIE						
<i>Mus musculus</i> Adie						
<i>Rattus norvegicus</i> Adie						
<i>Homo sapiens</i> ADIF1						
<i>Homo sapiens</i> ADIF2						
<i>Pan troglodytes</i> ADIF1						
<i>Pongo abelii</i> ADIF1						
<i>Nomascus leucogenys</i> ADIF1						
<i>Macaca mulatta</i> ADIF1						
<i>Papio hamadryas</i> ADIF1						

<i>Microcebus murinus</i> ADIF1	-	-----	-
<i>Otolemur garnettii</i> ADIF1	-	-----	-
<i>Mus musculus</i> Adif1	-	-----	-
<i>Rattus norvegicus</i> Adif1	-	-----	-
<i>Cavia porcellus</i> ADIF1	-	-----	-
<i>Oryctolagus cuniculus</i> ADIF1	-	-----	-
<i>Ochotona princeps</i> ADIF1	-	-----	-
<i>Bos taurus</i> ADIF1	-	-----	-
<i>Equus caballus</i> ADIF1	-	-----	-
<i>Canis lupus familiaris</i> ADIF1	-	-----	-
<i>Felis catus</i> ADIF1	-	-----	-
<i>Dasyopus novemcinctus</i> ADIF1	-	-----	-
<i>Loxodonta africana</i> ADIF1	-	-----	-
<i>Homo sapiens</i> ADIG	-	-----	-
<i>Pan troglodytes</i> ADIG	-	-----	-
<i>Pongo abelii</i> ADIG	-	-----	-
<i>Callithrix jacchus</i> ADIG	-	-----	-
<i>Otolemur garnettii</i> ADIG	-	-----	-
<i>Mus musculus</i> Adig	-	-----	-
<i>Rattus norvegicus</i> Adig	-	-----	-
<i>Cavia porcellus</i> ADIG	-	-----	-
<i>Oryctolagus cuniculus</i> ADIG	-	-----	-
<i>Tursiops truncatus</i> ADIG	-	-----	-
<i>Bos taurus</i> ADIG	-	-----	-
<i>Equus caballus</i> ADIG	-	-----	-
<i>Canis lupus familiaris</i> ADIG	-	-----	-
<i>Myotis lucifugus</i> ADIG	-	-----	-
<i>Homo sapiens</i> ADIH	-	-----	-
<i>Pan troglodytes</i> ADIH	-	-----	-
<i>Pongo abelii</i> ADIH	-	-----	-
<i>Nomascus leucogenys</i> ADIH	-	-----	-
<i>Macaca mulatta</i> ADIH	-	-----	-
<i>Papio hamadryas</i> ADIH	-	-----	-
<i>Mus musculus</i> Adih	-	-----	-
<i>Rattus norvegicus</i> Adih	-	-----	-
<i>Dipodomys ordii</i> ADIH	-	-----	-
<i>Cavia porcellus</i> ADIH	-	-----	-
<i>Bos taurus</i> ADIH	-	-----	-
<i>Equus caballus</i> ADIH	-	-----	-
<i>Canis lupus familiaris</i> ADIH	-	-----	-
<i>Pteropus vampyrus</i> ADIH	-	-----	-
<i>Loxodonta africana</i> ADIH	-	-----	-
<i>Homo sapiens</i> ADII	-	-----	-
<i>Pongo abelii</i> ADII	-	-----	-
<i>Macaca mulatta</i> ADII	-	-----	-
<i>Mus musculus</i> Adii	-	-----	-
<i>Rattus norvegicus</i> Adii	-	-----	-
<i>Bos taurus</i> ADII	-	-----	-
<i>Canis lupus familiaris</i> ADII	-	-----	-
<i>Dasyopus novemcinctus</i> ADII	-	-----	-
<i>Homo sapiens</i> ADIJ	-	-----	-
<i>Pan troglodytes</i> ADIJ	-	-----	-
<i>Papio hamadryas</i> ADIJ	-	-----	-
<i>Mus musculus</i> Adij	-	-----	-
<i>Rattus norvegicus</i> Adij	-	-----	-
<i>Oryctolagus cuniculus</i> ADIJ	-	-----	-
<i>Bos taurus</i> ADIJ	-	-----	-
<i>Canis lupus familiaris</i> ADIJ	-	-----	-
<i>Loxodonta africana</i> ADIJ	-	-----	-
<i>Homo sapiens</i> ADIK	-	-----	-
<i>Pan troglodytes</i> ADIK	-	-----	-
<i>Gorilla gorilla</i> ADIK	-	-----	-
<i>Papio hamadryas</i> ADIK	-	-----	-
<i>Callithrix jacchus</i> ADIK	-	-----	-
<i>Rattus norvegicus</i> Adik	-	-----	-
<i>Cavia porcellus</i> ADIK	-	-----	-
<i>Equus caballus</i> ADIK	-	-----	-
<i>Canis lupus familiaris</i> ADIK	-	-----	-
<i>Dasyopus novemcinctus</i> ADIK	-	-----	-
<i>Loxodonta africana</i> ADIK	-	-----	-
<i>Mus musculus</i> Adil	-	-----	-
<i>Rattus norvegicus</i> Adil	-	-----	-
<i>Homo sapiens</i> ADIM	1	MLSVPSWL <del>CMF</del> SSHFNRNVPRCDIYEF <del>RQL</del> GT <del>VHT</del> NRSCLWCGKMMNGGCSAWGGLLSL	60
<i>Pan troglodytes</i> ADIM	1	MLSVPSWL <del>CMF</del> SSHFNRNVPRCDIYEF <del>RQL</del> GT <del>VHT</del> NRSCLWCGKMMNGGCSAWGGLLSL	60

<i>Pongo abelii</i> ADIM	1	-----MMNGGCSAWGGLLSL	16
<i>Nomascus leucogenys</i> ADIM	1	MLSVPSWLCMFSSHFNRNVPRCDIYEFRQLGTVHTNRSCLWCGKMMNGGCSAWGGLLSL	60
<i>Papio hamadryas</i> ADIM	1	MLSVPSWLCMFSSHFNRNVPRCDIYEFRQLGTVHTNRSCLWCGKMMNGGCSAWGGLLSL	60
<i>Callithrix jacchus</i> ADIM	1	-----MFSSHFNRNVPRCDIYESRQLESVHTDRSCLWCGKVMNGGCSARGGLLSL	51
<i>Mus musculus</i> Adim	-	-----	-
<i>Rattus norvegicus</i> Adim	1	-----MGAGLSGVGGSCCHS	15
<i>Cavia porcellus</i> ADIM	1	-----MGAVLPG-EEGCCHS	14
<i>Bos taurus</i> ADIM	-	-----	-
<i>Equus caballus</i> ADIM	-	-----	-
<i>Canis lupus familiaris</i> ADIM	1	-----MNGGRPWWGGLLPS	15
<i>Homo sapiens</i> ADIN	-	-----	-
<i>Pan troglodytes</i> ADIN	-	-----	-
<i>Pongo abelii</i> ADIN	-	-----	-
<i>Nomascus leucogenys</i> ADIN	-	-----	-
<i>Macaca mulatta</i> ADIN	-	-----	-
<i>Callithrix jacchus</i> ADIN	-	-----	-
<i>Mus musculus</i> Adin	-	-----	-
<i>Cavia porcellus</i> ADIN	-	-----	-
<i>Tursiops truncatus</i> ADIN	-	-----	-
<i>Canis lupus familiaris</i> ADIN	-	-----	-
<i>Dasyurus novemcinctus</i> ADIN	-	-----	-
<i>Loxodonta africana</i> ADIN	-	-----	-
<i>Homo sapiens</i> ADIO	-	-----	-
<i>Pan troglodytes</i> ADIO	-	-----	-
<i>Macaca mulatta</i> ADIO	-	-----	-
<i>Bos taurus</i> ADIO	-	-----	-
<i>Myotis lucifugus</i> ADIO	-	-----	-
<i>Homo sapiens</i> ADIP	1	-----MCVECVHVWGLHVCECVMCVCARECVVSACMHAWVCE	38
<i>Otolemur garnettii</i> ADIP	-	-----	-
<i>Mus musculus</i> Adip	-	-----	-
<i>Cavia porcellus</i> ADIP	-	-----	-
<i>Bos taurus</i> ADIP	-	-----	-
<i>Equus caballus</i> ADIP	-	-----	-
<i>Loxodonta africana</i> ADIP	-	-----	-
<i>Homo sapiens</i> ADIQ	-	-----	-
<i>Pan troglodytes</i> ADIQ	-	-----	-
<i>Pongo abelii</i> ADIQ	-	-----	-
<i>Nomascus leucogenys</i> ADIQ	-	-----	-
<i>Macaca mulatta</i> ADIQ	-	-----	-
<i>Mus musculus</i> Adiq	-	-----	-
<i>Rattus norvegicus</i> Adiq	-	-----	-
<i>Homo sapiens</i> ADIR	-	-----	-
<i>Pan troglodytes</i> ADIR	-	-----	-
<i>Pongo abelii</i> ADIR	-	-----	-
<i>Nomascus leucogenys</i> ADIR	-	-----	-
<i>Macaca mulatta</i> ADIR	-	-----	-
<i>Papio hamadryas</i> ADIR	-	-----	-
<i>Callithrix jacchus</i> ADIR	-	-----	-
<i>Tarsius syrichta</i> ADIR	-	-----	-
<i>Otolemur garnettii</i> ADIR	-	-----	-
<i>Tupaia belangeri</i> ADIR	-	-----	-
<i>Mus musculus</i> Adir	-	-----	-
<i>Rattus norvegicus</i> Adir	-	-----	-
<i>Cavia porcellus</i> ADIR	-	-----	-
<i>Oryctolagus cuniculus</i> ADIR	-	-----	-
<i>Tursiops truncatus</i> ADIR	-	-----	-
<i>Bos taurus</i> ADIR	-	-----	-
<i>Equus caballus</i> ADIR	-	-----	-
<i>Canis lupus familiaris</i> ADIR	-	-----	-
<i>Myotis lucifugus</i> ADIR	-	-----	-
<i>Pteropus vampyrus</i> ADIR	-	-----	-
<i>Erinaceus europaeus</i> ADIR	-	-----	-
<i>Dasyurus novemcinctus</i> ADIR	-	-----	-
<i>Choloepus hoffmanni</i> ADIR	-	-----	-
<i>Loxodonta africana</i> ADIR	-	-----	-

<i>Homo sapiens</i> ADIA	1	-----M	2
		70 80 90 100 110 120	
<i>Homo sapiens</i> ADIA	1	-----MM	2
<i>Papio hamadryas</i> ADIA	1	-----MM	2
<i>Mus musculus</i> Adia	1	-----MDGLMTDGSYHGSNPPCVLTPQEAPEAEL	29
<i>Rattus norvegicus</i> Adia	-	-----	-
<i>Cavia porcellus</i> ADIA	-	-----	-
<i>Ochotona princeps</i> ADIA	1	-----MA	2
<i>Bos taurus</i> ADIA	-	-----	-
<i>Equus caballus</i> ADIA	-	-----	-
<i>Canis lupus familiaris</i> ADIA	-	-----	-
<i>Felis catus</i> ADIA	-	-----	-
<i>Myotis lucifugus</i> ADIA	-	-----	-
<i>Dasyopus novemcinctus</i> ADIA	-	-----	-
<i>Loxodonta africana</i> ADIA	-	-----	-
<i>Homo sapiens</i> ADIB	-	-----	-
<i>Pan troglodytes</i> ADIB	-	-----	-
<i>Pongo abelii</i> ADIB	-	-----	-
<i>Nomascus leucogenys</i> ADIB	-	-----	-
<i>Callithrix jacchus</i> ADIB	-	-----	-
<i>Otolemur garnettii</i> ADIB	-	-----	-
<i>Mus musculus</i> Adib	1	-----MKGYGRGRGNEEREGEREFSTSSSISPPPLLR	30
<i>Rattus norvegicus</i> Adib	1	-----MGNEEREGERELSTSSSISPPFLLR	23
<i>Cavia porcellus</i> ADIB	1	-----MWQGPPIITLVGAQAAGGGVQGLCGARPGAVGRKEGRDWRLLTPHSASSFLPK	51
<i>Oryctolagus cuniculus</i> ADIB	1	-----MPASEAWHQGRLGWRVPRGLGWGPWGGSEDEQGTGRARPGGLSPLPYHSLPS	53
<i>Bos taurus</i> ADIB	-	-----	-
<i>Equus caballus</i> ADIB	1	-----MRGWVVSPALSSSTSFPR	18
<i>Canis lupus familiaris</i> ADIB	-	-----	-
<i>Myotis lucifugus</i> ADIB	-	-----	-
<i>Loxodonta africana</i> ADIB	-	-----	-
<i>Homo sapiens</i> ADIC	-	-----	-
<i>Macaca mulatta</i> ADIC	-	-----	-
<i>Papio hamadryas</i> ADIC	-	-----	-
<i>Callithrix jacchus</i> ADIC	-	-----	-
<i>Mus musculus</i> Adic	-	-----	-
<i>Rattus norvegicus</i> Adic	1	-----MPGVFVCLCRNI	12
<i>Cavia porcellus</i> ADIC	-	-----	-
<i>Oryctolagus cuniculus</i> ADIC	1	-----MRLCPVHACLVRVLRFRWACVVRGGGEPERRPSSHLCLEHRRHH	42
<i>Equus caballus</i> ADIC	1	-----MSSSGGIQVRKLGVHERVMSACRGPAPCLHSGI	33
<i>Canis lupus familiaris</i> ADIC	1	-----MGVCACVRSGPDPCLRSGI	19
<i>Myotis lucifugus</i> ADIC	-	-----	-
<i>Loxodonta africana</i> ADIC	1	-----MSSLPSPTLCLHSAI	15
<i>Homo sapiens</i> ADID	1	-----MDGVLCRSRLGVCVGSVSPWLTVMWIPGLR	31
<i>Pan troglodytes</i> ADID	1	-----MDGVLCRSRLGVCVGSVSPWLTVMWIPGLR	31
<i>Pongo abelii</i> ADID	-	-----	-
<i>Nomascus leucogenys</i> ADID	1	-----MESCVGNWV-CCVGSVSPWLTVMWIPGLR	30
<i>Macaca mulatta</i> ADID	1	-----MESCVGISWV-CCVGSVSPWLTVMWIPGLR	30
<i>Otolemur garnettii</i> ADID	-	-----	-
<i>Mus musculus</i> Adid	1	-----MTIHLSISGLR	11
<i>Rattus norvegicus</i> Adid	-	-----	-
<i>Cavia porcellus</i> ADID	1	-----MESSFMSVPCTAGLSLGGSLGCSERSASPWLTAHSHIPGLR	42
<i>Oryctolagus cuniculus</i> ADID	1	-----MGHVCIPGLR	10
<i>Bos taurus</i> ADID	-	-----	-
<i>Equus caballus</i> ADID	3	QCVSGCLTRSRLKDYVCVACAYMCVQVCVCMYVVCVWVGCVAWGLLSWLTVMWIPGLR	62
<i>Canis lupus familiaris</i> ADID	1	-----MQIWPGLR	9
<i>Felis catus</i> ADID	-	-----	-
<i>Myotis lucifugus</i> ADID	1	-----MAGLISGLR	9
<i>Dasyopus novemcinctus</i> ADID	-	-----	-
<i>Loxodonta africana</i> ADID	-	-----	-
<i>Homo sapiens</i> ADIE	-	-----	-
<i>Pan troglodytes</i> ADIE	-	-----	-
<i>Pongo abelii</i> ADIE	-	-----	-
<i>Papio hamadryas</i> ADIE	-	-----	-
<i>Callithrix jacchus</i> ADIE	-	-----	-
<i>Otolemur garnettii</i> ADIE	-	-----	-
<i>Mus musculus</i> Adie	-	-----	-
<i>Rattus norvegicus</i> Adie	-	-----	-
<i>Homo sapiens</i> ADIF1	-	-----	-
<i>Homo sapiens</i> ADIF2	-	-----	-
<i>Pan troglodytes</i> ADIF1	-	-----	-
<i>Pongo abelii</i> ADIF1	-	-----	-
<i>Nomascus leucogenys</i> ADIF1	-	-----	-
<i>Macaca mulatta</i> ADIF1	-	-----	-
<i>Papio hamadryas</i> ADIF1	-	-----	-

<i>Microcebus murinus</i> ADIF1	-	-----	-
<i>Otolemur garnettii</i> ADIF1	-	-----	-
<i>Mus musculus</i> Adif1	1	-----MPSNCTCTQGLYILQFLFSLFQLRPCGLT	29
<i>Rattus norvegicus</i> Adif1	1	-----MPLPVSVSLSFQSRPCRLT	18
<i>Cavia porcellus</i> ADIF1	-	-----	-
<i>Oryctolagus cuniculus</i> ADIF1	-	-----	-
<i>Ochotona princeps</i> ADIF1	-	-----	-
<i>Bos taurus</i> ADIF1	-	-----	-
<i>Equus caballus</i> ADIF1	-	-----	-
<i>Canis lupus familiaris</i> ADIF1	-	-----	-
<i>Felis catus</i> ADIF1	-	-----	-
<i>Dasyopus novemcinctus</i> ADIF1	-	-----	-
<i>Loxodonta africana</i> ADIF1	-	-----	-
<i>Homo sapiens</i> ADIG	1	----MKVNSVLHVWVWDEHWSDDLQMHILLFKLIQSCQTTPLP-TQKVHLRLCVSLPEPK	54
<i>Pan troglodytes</i> ADIG	1	----MKVNRVLHVWVWDEHWSDDLQMHILMFKLIQSCQTTPLP-TQKVHLRLCVSLPEPK	54
<i>Pongo abelii</i> ADIG	1	----MKVNRVLHVWVWDEHWSDDLQMHILMFKLIQSCQTTPLP-TQKAHLRPCVSLPEPK	54
<i>Callithrix jacchus</i> ADIG	1	-----MCGKINTELLVFRLIQSCQTTPLL-TQKVHLPCVSLPEPK	40
<i>Otolemur garnettii</i> ADIG	-	-----	-
<i>Mus musculus</i> Adig	1	-----MK-KANARGDCTHAHSSAHPNSIMPKPPFGE-STDVFTSLLEPK	42
<i>Rattus norvegicus</i> Adig	1	-----MGGKANAGGQLSTAHS AHPNSIAPKPPFGE-YTDVCTSLLEPK	43
<i>Cavia porcellus</i> ADIG	-	-----	-
<i>Oryctolagus cuniculus</i> ADIG	-	-----	-
<i>Tursiops truncatus</i> ADIG	1	-----MELLGQTGYLDTHGEVSPGVNFCPCPFSCVMPKTPPKRVHLPCVSLPEPK	52
<i>Bos taurus</i> ADIG	-	-----	-
<i>Equus caballus</i> ADIG	1	-----MHGKVSTGVNYCKCPFLCSIMPKPPPVRVHLPCVSLPEPK	41
<i>Canis lupus familiaris</i> ADIG	1	-----MHGEVSTGVSGCKRLFSCSFMPKLSPERVHLPCVSLPEPK	41
<i>Myotis lucifugus</i> ADIG	-	-----	-
<i>Homo sapiens</i> ADIH	-	-----	-
<i>Pan troglodytes</i> ADIH	-	-----	-
<i>Pongo abelii</i> ADIH	-	-----	-
<i>Nomascus leucogenys</i> ADIH	-	-----	-
<i>Macaca mulatta</i> ADIH	-	-----	-
<i>Papio hamadryas</i> ADIH	-	-----	-
<i>Mus musculus</i> Adih	1	-----MLLQVTT	7
<i>Rattus norvegicus</i> Adih	1	-----MQLHPCLLLLLLIPLIFPPMPYWSVVCQHHVHSYLLFCHPQVTT	44
<i>Dipodomys ordii</i> ADIH	-	-----	-
<i>Cavia porcellus</i> ADIH	-	-----	-
<i>Bos taurus</i> ADIH	1	-----MARLTYSQLSCLPQVAT	17
<i>Equus caballus</i> ADIH	-	-----	-
<i>Canis lupus familiaris</i> ADIH	-	-----	-
<i>Pteropus vampyrus</i> ADIH	-	-----	-
<i>Loxodonta africana</i> ADIH	-	-----	-
<i>Homo sapiens</i> ADII	-	-----	-
<i>Pongo abelii</i> ADII	-	-----	-
<i>Macaca mulatta</i> ADII	-	-----	-
<i>Mus musculus</i> Adii	-	-----	-
<i>Rattus norvegicus</i> Adii	-	-----	-
<i>Bos taurus</i> ADII	-	-----	-
<i>Canis lupus familiaris</i> ADII	-	-----	-
<i>Dasyopus novemcinctus</i> ADII	-	-----	-
<i>Homo sapiens</i> ADIJ	-	-----	-
<i>Pan troglodytes</i> ADIJ	-	-----	-
<i>Papio hamadryas</i> ADIJ	-	-----	-
<i>Mus musculus</i> Adij	-	-----	-
<i>Rattus norvegicus</i> Adij	-	-----	-
<i>Oryctolagus cuniculus</i> ADIJ	-	-----	-
<i>Bos taurus</i> ADIJ	-	-----	-
<i>Canis lupus familiaris</i> ADIJ	-	-----	-
<i>Loxodonta africana</i> ADIJ	-	-----	-
<i>Homo sapiens</i> ADIK	-	-----	-
<i>Pan troglodytes</i> ADIK	-	-----	-
<i>Gorilla gorilla</i> ADIK	-	-----	-
<i>Papio hamadryas</i> ADIK	-	-----	-
<i>Callithrix jacchus</i> ADIK	-	-----	-
<i>Rattus norvegicus</i> Adik	-	-----	-
<i>Cavia porcellus</i> ADIK	-	-----	-
<i>Equus caballus</i> ADIK	-	-----	-
<i>Canis lupus familiaris</i> ADIK	-	-----	-
<i>Dasyopus novemcinctus</i> ADIK	-	-----	-
<i>Loxodonta africana</i> ADIK	-	-----	-
<i>Mus musculus</i> Adil	-	-----	-
<i>Rattus norvegicus</i> Adil	-	-----	-
<i>Homo sapiens</i> ADIM	61	WHAYSLIYYTPKYKTTTPP---LQLSAPVLASAR---GDHAPGAL---LSSQGDSEALLRI	111
<i>Pan troglodytes</i> ADIM	61	WHAYSLIYYTPKYKTTTPP---LQLSAPVLASAR---GDHAPGAL---LSSQGDSEALLRI	111

<i>Pongo abelii</i> ADIM	17	WHSYSLIYYTPKYKTTTPP---LQLSAPVLASAR---GDHAPGAL---LSSQGDSEALLRI	67
<i>Nomascus leucogenys</i> ADIM	61	WHAYSLLIYYTPKYKTTTPP---LQLSAPVLASAR---GDHAPGAL---LSSQGDSEALLRI	111
<i>Papio hamadryas</i> ADIM	61	WHAYSLLIYYTPKYKTTTPP---LQLSAPVLASAR---GDHAPGAL---LSSQGSSEALLRI	111
<i>Callithrix jacchus</i> ADIM	52	WHAYSLLIYYTPNYKTKLRAASALSSSPGIHPRRPR-SWKEP-----QGGSEALLRI	101
<i>Mus musculus</i> Adim	-	-----	-
<i>Rattus norvegicus</i> Adim	16	GMTAALFITHQKYKTTQPAA-ALISKPGICLRRLRCGCRVPGAYSPhQLPRGDSADLSRA	74
<i>Cavia porcellus</i> ADIM	15	GVSAALFITHQSIKPPSPAA-VLIFSPGICLRRSR-FLKPP-----LSSQGGSVALLKI	66
<i>Bos taurus</i> ADIM	-	-----	-
<i>Equus caballus</i> ADIM	-	-----	-
<i>Canis lupus familiaris</i> ADIM	16	GMPAALFITHQSIKPPSR---LQLASPALAFAREA-PPSSP-----GGSGALLRN	61
<i>Homo sapiens</i> ADIN	-	-----	-
<i>Pan troglodytes</i> ADIN	-	-----	-
<i>Pongo abelii</i> ADIN	-	-----	-
<i>Nomascus leucogenys</i> ADIN	-	-----	-
<i>Macaca mulatta</i> ADIN	-	-----	-
<i>Callithrix jacchus</i> ADIN	-	-----	-
<i>Mus musculus</i> Adin	-	-----	-
<i>Cavia porcellus</i> ADIN	1	-----MSPVLPVSTGA	11
<i>Tursiops truncatus</i> ADIN	-	-----	-
<i>Canis lupus familiaris</i> ADIN	-	-----	-
<i>Dasyopus novemcinctus</i> ADIN	-	-----	-
<i>Loxodonta africana</i> ADIN	-	-----	-
<i>Homo sapiens</i> ADIO	-	-----	-
<i>Pan troglodytes</i> ADIO	-	-----	-
<i>Macaca mulatta</i> ADIO	-	-----	-
<i>Bos taurus</i> ADIO	-	-----	-
<i>Myotis lucifugus</i> ADIO	-	-----	-
<i>Homo sapiens</i> ADIP	39	SDCPPRSCVTAAFPSPGVRLGKHLRFPGCFSPQFSGCFVQLLPNSVPSLCVSPFPPGPRK	98
<i>Otolemur garnettii</i> ADIP	-	-----	-
<i>Mus musculus</i> Adip	-	-----	-
<i>Cavia porcellus</i> ADIP	-	-----	-
<i>Bos taurus</i> ADIP	1	-----MGLFSPWGSSSPHPPCVS-PAGLGGK	25
<i>Equus caballus</i> ADIP	-	-----	-
<i>Loxodonta africana</i> ADIP	1	-----MVIAGLGKRPSFLAASPRSPIPTRPLPHLSPCGVSFPFGHGRK	43
<i>Homo sapiens</i> ADIQ	1	-----MQWLRVRESPGEATGHRVT	19
<i>Pan troglodytes</i> ADIQ	1	-----MQWLRVRESPGEATGHRVT	19
<i>Pongo abelii</i> ADIQ	1	-----MQWLRVRESPGEATGHRVT	19
<i>Nomascus leucogenys</i> ADIQ	1	-----MQWLRVRESPGEATGHRVT	19
<i>Macaca mulatta</i> ADIQ	1	-----MQWLRVRDSPGEATGHRVT	19
<i>Mus musculus</i> Adiq	1	-----MRVI	4
<i>Rattus norvegicus</i> Adiq	1	-----MRVI	4
<i>Homo sapiens</i> ADIR	-	-----	-
<i>Pan troglodytes</i> ADIR	-	-----	-
<i>Pongo abelii</i> ADIR	-	-----	-
<i>Nomascus leucogenys</i> ADIR	-	-----	-
<i>Macaca mulatta</i> ADIR	-	-----	-
<i>Papio hamadryas</i> ADIR	-	-----	-
<i>Callithrix jacchus</i> ADIR	-	-----	-
<i>Tarsius syrichta</i> ADIR	-	-----	-
<i>Otolemur garnettii</i> ADIR	-	-----	-
<i>Tupaia belangeri</i> ADIR	-	-----	-
<i>Mus musculus</i> Adir	-	-----	-
<i>Rattus norvegicus</i> Adir	-	-----	-
<i>Cavia porcellus</i> ADIR	-	-----	-
<i>Oryctolagus cuniculus</i> ADIR	-	-----	-
<i>Tursiops truncatus</i> ADIR	-	-----	-
<i>Bos taurus</i> ADIR	-	-----	-
<i>Equus caballus</i> ADIR	-	-----	-
<i>Canis lupus familiaris</i> ADIR	-	-----	-
<i>Myotis lucifugus</i> ADIR	-	-----	-
<i>Pteropus vampyrus</i> ADIR	-	-----	-
<i>Erinaceus europaeus</i> ADIR	-	-----	-
<i>Dasyopus novemcinctus</i> ADIR	-	-----	-
<i>Choloepus hoffmanni</i> ADIR	-	-----	-
<i>Loxodonta africana</i> ADIR	-	-----	-

<i>Homo sapiens</i> ADIA	3	MKIP-WGSIPV-LMLL-----LLL---GLIDISQAQ-L-----	29
		130 140 150 160 170 180	
<i>Homo sapiens</i> ADIA	3	MKIP-WGSIPV-LMLL-----LLL---GLIDISQAQ-L-----	29
<i>Papio hamadryas</i> ADIA	3	MKIL-WGSIPV-LMLL-----LLL---GLLDVSWAQ-G-----	29
<i>Mus musculus</i> Adia	30	MKTQ-WGEVWT-HLLL-----LLL---GFLHVSWAQ-S-----	56
<i>Rattus norvegicus</i> Adia	1	MKTQ-WSEIIT-PLLL-----LLL---GLLHVSWAQ-S-----	27
<i>Cavia porcellus</i> ADIA	1	MKIP-WGDVSV-LLLL-----LLL---PLLRVSRVQ-S-----	27
<i>Ochotona princeps</i> ADIA	3	MKSP-RGSIPA---LL-----LLL---SLLDASQAQ-S-----	27
<i>Bos taurus</i> ADIA	1	MKTP-RGSIVL---L-----LLL---NLLRVSWAQ-S-----	24
<i>Equus caballus</i> ADIA	1	MKTLTMGGILA-LLPL-----LLL---GPLDVSRQA-S-----	28
<i>Canis lupus familiaris</i> ADIA	1	MKTP-RGGILA-LLLP-----LLL---GLLEVSWAQ-----	26
<i>Felis catus</i> ADIA	1	MKTV-RDGVLASLLLL-----LLLF--LFLLEVSWAQ-S-----	30
<i>Myotis lucifugus</i> ADIA	1	MKTP-RGGILA-LLLP-----LLL---GPLDVSRQA-R-----	27
<i>Dasyopus novemcinctus</i> ADIA	1	MKTL-WGGVLP---L-----LLL---SLPDASCAQ-S-----	24
<i>Loxodonta africana</i> ADIA	1	MKTL-WAGIPV-LLPL-----LLL---SLLGVSWAQ-I-----	27
<i>Homo sapiens</i> ADIB	1	MDVG-PSSPLHLGKL-----LLL---LLLPLRGQAN-T-----	30
<i>Pan troglodytes</i> ADIB	1	MDMG-PSSPLHLGKL-----LLL---LLLPLRGQAN-T-----	30
<i>Pongo abelii</i> ADIB	1	MDMG-PSSPLHLGKL-----LLP---LLLPLRGQAN-T-----	30
<i>Nomascus leucogenys</i> ADIB	1	MDVG-PSSPLHLGKL-----LLL---LLLPLRGQAN-T-----	31
<i>Callithrix jacchus</i> ADIB	1	MDVG-HGS--HFGLNL-----LLL---LLLPLRSQAN-T-----	29
<i>Otolemur garnettii</i> ADIB	1	M-V--PNCRPHLQNL-----LLL---LLVPLGGQAS-T-----	28
<i>Mus musculus</i> Adib	31	MVVG-PSCQPPCGLCL-----LLLF--LLALPLRSQAS-A-----	61
<i>Rattus norvegicus</i> Adib	24	MVVG-TSCQPQHGLYL-----LLL---LLALPLRSQAN-A-----	53
<i>Cavia porcellus</i> ADIB	52	MDVG-L---PLGLHL-----LLL---LLAVPLRGQTR-P-----	77
<i>Oryctolagus cuniculus</i> ADIB	54	MDVG-LGSQSPGLHL-----LLL---LLALPLGSQAS-A-----	83
<i>Bos taurus</i> ADIB	1	MGGG-A--WPLLVLNL-----LLL---LLARPLRGQTE-T-----	28
<i>Equus caballus</i> ADIB	19	MDVG-SSSRPLGLHL-----LLL---LLALPLGGQAS-T-----	48
<i>Canis lupus familiaris</i> ADIB	1	MDTG-PSSWPHLGLNL-----LLL---LLALPLGGQAS-T-----	30
<i>Myotis lucifugus</i> ADIB	1	MDRG-SSIWPLGLNL-----LLL---LLALPLGGLAA-T-----	30
<i>Loxodonta africana</i> ADIB	1	M--G-PGSQPPLSLNL-----LLL---LLTLPLRGQAS-T-----	28
<i>Homo sapiens</i> ADIC	1	MEGP-RG-WLVLCVLA-----ISL---AS-MV--TE-D-----	24
<i>Macaca mulatta</i> ADIC	1	MEGP-QG-WLVVCVLA-----ISL---AS-IV--TQ-N-----	24
<i>Papio hamadryas</i> ADIC	1	MEGP-QG-WLVVCVLA-----ISL---AS-IV--TQ-N-----	24
<i>Callithrix jacchus</i> ADIC	1	MEGS-QG-WLVVCVLA-----ISL---AS-TV--TQ-D-----	24
<i>Mus musculus</i> Adic	1	METS-QG-WLVACVLT-----MTL---VW-TV--AE-D-----	24
<i>Rattus norvegicus</i> Adic	13	METS-QG-WLVACVLA-----VTL---VW-TV--AE-D-----	36
<i>Cavia porcellus</i> ADIC	1	M--TP-RL-WLLVCVLA-----VSL---SS-GV--AE-D-----	23
<i>Oryctolagus cuniculus</i> ADIC	43	METS-T--WLLLCVLA-----TSL---SS-GV--TQ-G-----	65
<i>Equus caballus</i> ADIC	34	MEAP-WG-WLMVGVLA-----VSL---AS-TG--TQ-D-----	57
<i>Canis lupus familiaris</i> ADIC	20	MEAP-WG-WLALCVLA-----TSL---AS-AV--TQ-D-----	43
<i>Myotis lucifugus</i> ADIC	1	MEAP-WG-WLVVGVLA-----MSL---AS-TV--TQ-N-----	24
<i>Loxodonta africana</i> ADIC	16	MEAP-KG-WLVVCVLA-----VSL---AS-TV--TQ-D-----	39
<i>Homo sapiens</i> ADID	32	M--L---LLG--AVL-----LLL---ALP--GHDQ-E--TTTQGP-G-----	57
<i>Pan troglodytes</i> ADID	32	M--L---LLG--AVL-----LLL---ALP--GHDQ-E--TTTQGP-G-----	57
<i>Pongo abelii</i> ADID	1	M--L---LLG--AIL-----LLL---ALP--SHGQ-E--TTTQGP-R-----	26
<i>Nomascus leucogenys</i> ADID	31	M--L---LLG--AVL-----LLL---ALP--SHGQ-D--TTTQGP-G-----	56
<i>Macaca mulatta</i> ADID	31	M--L---LLG--AVL-----LLL---ALP--SHGQ-D--TTTQGP-G-----	55
<i>Otolemur garnettii</i> ADID	1	M--L---LLQ--AVL-----LLL---ALP--SHGQ-D--TSTEGP-G-----	26
<i>Mus musculus</i> Adid	12	M--L---LLQ--ALL-----FLL---ILP--SHAE-DDVTTEEL-A-----	39
<i>Rattus norvegicus</i> Adid	1	M--L---LLQ--ALL-----FLL---ILP--SHEG-I--TATEGP-G-----	26
<i>Cavia porcellus</i> ADID	43	M--L---VLR--AVL-----LLL---ALP--SCAQ-E--TSAAES-E-----	68
<i>Oryctolagus cuniculus</i> ADID	11	M--L---LLQ--AVL-----LLL---ALP--SHGQ-D--STTESP-G-----	36
<i>Bos taurus</i> ADID	1	M--L---LQG--ALL-----LLL---ALP--SHGE-D--NM-EDP-----	24
<i>Equus caballus</i> ADID	63	M--L---LLQ--AVL-----LLL---VLP--SPGE-V--TTTEE-----	86
<i>Canis lupus familiaris</i> ADID	10	M--L---LLR--AVL-----LLL---VLP--AHGQ-D--SVAEGP-G-----	35
<i>Felis catus</i> ADID	1	M--L---LLR--AVL-----LLL---VLP--IRGQ-D--SETEGP-G-----	26
<i>Myotis lucifugus</i> ADID	10	M--L---LLQ--AVL-----LLL---VLP--SRGQ-D--TPTKEP-E-----	35
<i>Dasyopus novemcinctus</i> ADID	1	M--L---LLQ--AVL-----LLL---ALP--SHGQ-D--TTQEEP-G-----	27
<i>Loxodonta africana</i> ADID	1	M--L---LLR--AVL-----LLL---ALP--NNGE-N--LATEGP-G-----	26
<i>Homo sapiens</i> ADIE	1	MR-P---LLV--LLL-----LGL---A---AGS-PPL---D-D-----	21
<i>Pan troglodytes</i> ADIE	1	MR-P---LLV--LLL-----LGL---A---AGS-PPL---D-D-----	21
<i>Pongo abelii</i> ADIE	1	MR-P---LLV--LLL-----LGL---A---AGS-PPL---D-D-----	21
<i>Papio hamadryas</i> ADIE	1	MR-P---LLV--LLL-----LGL---A---AGS-PPL---D-D-----	21
<i>Callithrix jacchus</i> ADIE	1	MR-P---LLV--LLL-----LGL---A---ASS-PPL---E-D-----	21
<i>Otolemur garnettii</i> ADIE	1	MR-L---LLA--LLF-----LGL---A---AGS-PPL---D-D-----	21
<i>Mus musculus</i> Adie	1	MR-P---LLA--LLL-----LGL---V---SGS-PPL---D-D-----	21
<i>Rattus norvegicus</i> Adie	1	MR-P---LLA--LLL-----LGL---A---SGS-PPL---D-D-----	21
<i>Homo sapiens</i> ADIF1	1	MR-I---WWL--LLA-----IEI-C--TGN--INSQ-D-----	21
<i>Homo sapiens</i> ADIF2	1	MR-I---WWL--LLA-----IEI-C--TGN--INSQ-D-----	21
<i>Pan troglodytes</i> ADIF1	1	MR-I---WWF--LLA-----IEI-C--TGN--INSQ-D-----	21
<i>Pongo abelii</i> ADIF1	1	MR-I---WWF--LLA-----VEI-C--TGN--INSQ-D-----	21
<i>Nomascus leucogenys</i> ADIF1	1	MR-I---WWL--LLA-----IEI-C--KGN--INSQ-D-----	21
<i>Macaca mulatta</i> ADIF1	1	MR-I---WWF--LLA-----IGI-C--AGN--ISSQ-N-----	21
<i>Papio hamadryas</i> ADIF1	1	MR-I---WWF--LLA-----IEI-C--TGN--ISSQ-N-----	21

<i>Microcebus murinus</i> ADIF1	1	MK-I---CWL--LLA-----AGI-C--TGN--INAQ-D-----	21
<i>Otolemur garnettii</i> ADIF1	1	MK-I---WWL--LLA-----IGI-C--TGN--INAQ-D-----	21
<i>Mus musculus</i> Adif1	30	MR-I---WWL--LLV-----MGA-C--TRS--VFSQ-D-----	50
<i>Rattus norvegicus</i> Adif1	19	MR-I---WWL--LLV-----MDA---GS--VFSQ-D-----	37
<i>Cavia porcellus</i> ADIF1	1	MR-T---WWL--LLA-----LGV-C--TGA--MSSQ-D-----	21
<i>Oryctolagus cuniculus</i> ADIF1	1	MR-I---WWL--LLV-----TGV-C--TGS--VSSQ-D-----	21
<i>Ochotona princeps</i> ADIF1	1	MR-I---WWL--LLV-----IGV-C--LGS--VSIQ-D-----	21
<i>Bos taurus</i> ADIF1	1	MR-I---WWL--LLA-----SGV-C--TGM--VSSQ-D-----	21
<i>Equus caballus</i> ADIF1	1	MR-I---WWL--LLV-----TGI-C--TGK--VNSQ-D-----	21
<i>Canis lupus familiaris</i> ADIF1	1	MR-I---WLL--LLA-----AGI-C--MGN--VKSQ-D-----	21
<i>Felis catus</i> ADIF1	1	MR-T---WLL--LLA-----GGI-C--MGN--VNAQ-D-----	21
<i>Dasyopus novemcinctus</i> ADIF1	1	MR-I---WWV--LLA-----IGI-C--MGS--INSQ-D-----	22
<i>Loxodonta africana</i> ADIF1	1	MR-F---WWL--LLA-----VGA-C--TGN--INSQ-D-----	21
<i>Homo sapiens</i> ADIG	55	M--F---VLL--YVT-S----FAI-C--A----SGQ-PR-GNQLKG-E-----	80
<i>Pan troglodytes</i> ADIG	55	M--F---VLL--YVT-S----FAI-C--A----SGQ-PR-GNQLKG-E-----	80
<i>Pongo abelii</i> ADIG	55	M--F---VLL--YVT-S----FAI-C--A----SGQ-PR-GNQLKG-E-----	80
<i>Callithrix jacchus</i> ADIG	41	M--F---VLL--YVT-S----FAI-C--A----SGQ-PR-GNQLKG-E-----	66
<i>Otolemur garnettii</i> ADIG	1	M--F---VLL--YVT-S----FAI-C--A----SGQ-PR-GNQLKG-E-----	26
<i>Mus musculus</i> Adig	43	M--I---VLL--YVT-S----LAI-C--A----SGQ-PR-ANQAKG-E-----	68
<i>Rattus norvegicus</i> Adig	44	M--I---VLL--YVT-S----LAI-C--A----SGQ-PR-GNQAKG-E-----	69
<i>Cavia porcellus</i> ADIG	1	M--F---VLL--YVT-S----FAI-C--A----SGQ-PR-GSQVKG-E-----	26
<i>Oryctolagus cuniculus</i> ADIG	1	M--F---VLL--YVT-S----FAL-C--A----SGQ-PR-GHQFKG-E-----	26
<i>Tursiops truncatus</i> ADIG	53	M--F---VLL--YVT-S----FAI-C--A----SGQ-PR-GNQFKG-D-----	78
<i>Bos taurus</i> ADIG	1	M--F---VLL--YVT-S----FAI-C--A----SGQ-PR-SNQFKG-E-----	26
<i>Equus caballus</i> ADIG	42	M--F---VLL--YVT-S----FAI-C--A----SGQ-PR-GSQFKG-D-----	67
<i>Canis lupus familiaris</i> ADIG	42	M--F---VLL--YVT-S----FAI-C--A----SGQ-PR-GNQFKG-E-----	67
<i>Myotis lucifugus</i> ADIG	1	M--F---VLL--YVT-S----FAI-C--V----SGQ-PR-GNQFKG-E-----	26
<i>Homo sapiens</i> ADIH	1	M--I---PWV--LLA-C----ALP-C--A----AD-PLLGAFAFARR-D-----	26
<i>Pan troglodytes</i> ADIH	1	M--I---PWV--LLA-C----ALP-C--A----AD-PLLGAFAFARR-D-----	26
<i>Pongo abelii</i> ADIH	1	M--I---PWV--LLA-C----ALP-C--A----AD-PLLGAFAFARR-D-----	26
<i>Nomascus leucogenys</i> ADIH	1	M--I---PWV--LLA-C----ALP-C--A----AD-PLLGAFAFARR-D-----	26
<i>Macaca mulatta</i> ADIH	1	M--I---PWV--LLA-C----ALP-C--A----AD-PLLGAFAFARR-D-----	26
<i>Papio hamadryas</i> ADIH	1	M--I---PWV--LLA-C----ALP-C--A----AD-PLLGAFAFARR-D-----	26
<i>Mus musculus</i> Adih	8	M--I---SWV--LLA-C----ALP-C--A----AD-PMLGAFAFARR-D-----	33
<i>Rattus norvegicus</i> Adih	45	M--I---SWM--LLA-C----ALP-C--A----AD-PMLGAFAFARR-D-----	70
<i>Dipodomys ordii</i> ADIH	1	M--I---PWV--LLA-C----ALP-C--A----AD-PLLGPFARR-D-----	26
<i>Cavia porcellus</i> ADIH	1	M--I---PWV--LLA-C----ALP-C--A----AD-PLLAAYARR-D-----	26
<i>Bos taurus</i> ADIH	18	M--I---PWV--LLA-C----ALP-C--A----AD-PLLAFAFARR-D-----	43
<i>Equus caballus</i> ADIH	1	M--I---PWV--LLA-C----ALP-C--A----AD-PLLGAFAFARR-D-----	26
<i>Canis lupus familiaris</i> ADIH	1	M--I---PWV--LLA-C----ALP-C--A----AD-PLLGAFAFARR-D-----	26
<i>Pteropus vampyrus</i> ADIH	1	M--I---PWV--LLA-C----ALP-C--A----AD-PLLGAFARR-D-----	26
<i>Loxodonta africana</i> ADIH	1	M--I---SWV--LLA-C----ALP-C--A----TD-PLLGAFAFARR-D-----	26
<i>Homo sapiens</i> ADII	1	M-----ALG--LLIA---VPLLL---QAAPRGAHAYEMM-----	26
<i>Pongo abelii</i> ADII	1	M-----ALG--LLIA---VPLLL---QAAPRAAHAYEMM-----	26
<i>Macaca mulatta</i> ADII	1	M-----ALG--LLIA---VPLLL---QAAPPGAHAYEMM-----	26
<i>Mus musculus</i> Adii	1	M-----ALG--LLIA---VPLLL---QAAPPGAHAYEML-----	26
<i>Rattus norvegicus</i> Adii	1	M-----ALG--LLIA---VPLLL---QAAPPGAHAYEML-----	26
<i>Bos taurus</i> ADII	1	M-----ALG--LLIA---VPLLL---QAAPPGAHAYEMM-----	26
<i>Canis lupus familiaris</i> ADII	1	M-----ALG--LLIA---VPLLL---QAAPPGAHAYEMM-----	26
<i>Dasyopus novemcinctus</i> ADII	1	M-----ALA--LLIA---VPLLL---QAAPPGAHAYEMM-----	26
<i>Homo sapiens</i> ADIJ	1	M-----VLL--LVIL---IPVLV---SSA-GTSAHYEML-----	25
<i>Pan troglodytes</i> ADIJ	1	M-----VLL--LVIL---IPVLV---SSA-GTSAHYEML-----	25
<i>Papio hamadryas</i> ADIJ	1	M-----VLL--LVIL---IPVLV---SSA-GTSAHYEML-----	25
<i>Mus musculus</i> Adij	1	M-----VLL--LVIL---IPVLV---SSA-GTSAHYEML-----	25
<i>Rattus norvegicus</i> Adij	1	M-----VLL--LVIL---IPVLV---SSA-GTSAHYEML-----	25
<i>Oryctolagus cuniculus</i> ADIJ	1	M-----VLL--LVIL---IPVLV---SSA-GTSAHYEML-----	25
<i>Bos taurus</i> ADIJ	1	M-----VLL--LVIL---IPVLV---SSA-GTSAHYEML-----	25
<i>Canis lupus familiaris</i> ADIJ	1	M-----VLL--LVIL---IPVLV---SSA-GTSAHYEML-----	25
<i>Loxodonta africana</i> ADIJ	1	M-----VLL--LVIL---IPVLV---SSA-GTSAHYEML-----	25
<i>Homo sapiens</i> ADIK	1	M-----VLL--LLVA---IPLLV---HSS-RGPAHYEML-----	25
<i>Pan troglodytes</i> ADIK	1	M-----VLL--LLVA---IPLLV---HSS-RGPAHYEML-----	25
<i>Gorilla gorilla</i> ADIK	1	M-----VLL--LLVA---IPLLV---HSS-RGPAHYEML-----	25
<i>Papio hamadryas</i> ADIK	1	M-----VLL--LLVA---IPLLV---HSS-RGPAHYEML-----	25
<i>Callithrix jacchus</i> ADIK	1	M-----VLL--LLVA---IPLLV---HSS-RGPAHYEML-----	25
<i>Rattus norvegicus</i> Adik	1	M-----VLL--LLVA---IPLLV---HSS-RGPTHYEML-----	25
<i>Cavia porcellus</i> ADIK	1	M-----VLL--LLVA---IPLLV---HSS-RGPAHYEML-----	25
<i>Equus caballus</i> ADIK	1	M-----VLL--LLVA---IPLLV---QSS-RGPAHYEML-----	25
<i>Canis lupus familiaris</i> ADIK	1	M-----VLL--LLVA---IPLLV---HSS-RGPAHYEML-----	25
<i>Dasyopus novemcinctus</i> ADIK	1	M-----VLL--LLVA---IPLLV---HSS-RGPAHYEML-----	25
<i>Loxodonta africana</i> ADIK	1	M-----VLL--LLVA---IPLLV---HSS-REPAHYEML-----	25
<i>Mus musculus</i> Adil	1	M-----LLV--LVVL---IPVLV---SSG-GPDGHYEML-----	25
<i>Rattus norvegicus</i> Adil	1	M-----LLV--LVVL---IPVLV---SSG-GPDGHYEML-----	25
<i>Homo sapiens</i> ADIM	112	M--L-WRQLIY--WQLL--A-LFPLPFC-----LCQDEYMESPQTG-G-----	145
<i>Pan troglodytes</i> ADIM	112	M--L-WRQLVY--WQLL--A-LFPLPFC-----LCQDEYMESPQTG-G-----	145



<i>Pongo abelii</i> ADIM	68	M--L-WRQLIY--WQLL--A-LFFLPFC-----LCQDEYMESPQTG-G-----	101
<i>Nomascus leucogenys</i> ADIM	112	M--L-WRQLVY--WQLL--A-LFFLPFC-----LCQDEYMESPQTG-G-----	145
<i>Papio hamadryas</i> ADIM	112	M--L-WRQLVY--WQLL--A-LFFLPFC-----LCQDEYMESPQTG-G-----	145
<i>Callithrix jacchus</i> ADIM	102	M--L-WRQLIY--WQLL--A-LFFLPFC-----LCQDEYMESPQTG-G-----	135
<i>Mus musculus</i> Adim	1	M--L-GRQRIW--WHLL--P-LLFLPFC-----LCQDEYMESPQAG-G-----	34
<i>Rattus norvegicus</i> Adim	75	M--L-RRQLVW--WHLL--A-LFFLPFC-----LCQDEYMESPQAG-G-----	108
<i>Cavia porcellus</i> ADIM	67	M--L-GSQCIC--WHLL--A-LFFLPFC-----LCQDDYMEPPQTGGG-----	101
<i>Bos taurus</i> ADIM	1	M--L-GRQLVY--WHLL--A-LFFLPFC-----LCQDEYMESPQTG-G-----	34
<i>Equus caballus</i> ADIM	1	M--L-RRQLVY--WHLL--A-LFFLPFC-----LCQDEYMESPQTG-G-----	34
<i>Canis lupus familiaris</i> ADIM	62	M--L-GRQLFY--WHLL--A-LFFLPFC-----LCQDEYMESPQTG-G-----	95
<i>Homo sapiens</i> ADIN	1	M-LP----LLL--GLLG----PAA--C-----WA-----	16
<i>Pan troglodytes</i> ADIN	1	M-LP----LLL--GLLG----PAA--C-----WA-----	16
<i>Pongo abelii</i> ADIN	1	M-LP----LLL--VLLG----PAA--C-----WA-----	16
<i>Nomascus leucogenys</i> ADIN	1	M-LP----LLL--GLLG----PAA--C-----WA-----	16
<i>Macaca mulatta</i> ADIN	1	M-LP----LLL--GLLG----PAA--C-----WA-----	16
<i>Callithrix jacchus</i> ADIN	1	M-LP----LLL--GLLG----PVG--C-----WA-----	16
<i>Mus musculus</i> Adin	1	M-LL----LLL--GFLG----PAA--C-----WA-----	16
<i>Cavia porcellus</i> ADIN	12	M-LL----LLF--GLLA----PAT--C-----WA-----	27
<i>Tursiops truncatus</i> ADIN	1	M-LP----LLL--GLLG----PAA--C-----WA-----	16
<i>Canis lupus familiaris</i> ADIN	1	M-LL----LLL--GLLG----PAA--C-----WA-----	16
<i>Dasyops novemcinctus</i> ADIN	1	M-LT----LLL--GLLG----PVA--C-----WA-----	16
<i>Loxodonta africana</i> ADIN	1	M-LP----ILL--GLLG----PAA--C-----WA-----	16
<i>Homo sapiens</i> ADIO	1	M--A---A---PALL--L-LALLL-----P-V-GAW-PGL-----	21
<i>Pan troglodytes</i> ADIO	1	M--A---A---PALL--L-LALLL-----P-A-GAW-PGL-----	21
<i>Macaca mulatta</i> ADIO	1	M--A---A---PTLL--L-LALLL-----P-A-GAW-PGL-----	21
<i>Bos taurus</i> ADIO	1	M--V---A---PALL--LLLA--L-----P-A-GAW-RGL-----	20
<i>Myotis lucifugus</i> ADIO	1	M--A---A---PGLL--LLLA--L-----P-A-GAW-PRL-----	20
<i>Homo sapiens</i> ADIP	99	MGSR---GQG--LLLAYCLLLAFA--S--G-L-V-LSRVPHVQGEQQEWE-----	136
<i>Otolemur garnettii</i> ADIP	1	MRSP---GWG--RVLACCLLLAVA--C--G-P-A-LSLVPRIQHEEQEQE-----	38
<i>Mus musculus</i> Adip	1	MGSC---AQG--FMLGCCLLLAIT--W--G-P-I-LSLVPVQGEQQEWE-----	38
<i>Cavia porcellus</i> ADIP	1	MGSR---GQR--LVLGCCLLLAFA--W--G-L-V-LSHVPRGQGEQQEQE-----	38
<i>Bos taurus</i> ADIP	26	MGSR---GLR--LALACCLLLAFA--C--G-L-V-LGRVPHGQGEQQEQE-----	63
<i>Equus caballus</i> ADIP	1	MGSR---GLG--LVLACCLLLAFA--C--G-P-V-LGRVPPGQGEQQEQE-----	38
<i>Loxodonta africana</i> ADIP	44	MGAL---ALG--LQLGCCLLVLIFA--C--A-P-V-LGRTPRGQQNQQEHEATPGDSKAE	90
<i>Homo sapiens</i> ADIQ	20	MVTA---ALG--PVWA--ALLLFLLMC--EIPMV-ELTFDRA-----	51
<i>Pan troglodytes</i> ADIQ	20	MGTA---ALG--PLWA--ALLLFLLMC--EIPMV-ELTFDRA-----	51
<i>Pongo abelii</i> ADIQ	20	MGTA---ALG--PLWA--ALLLFLLMC--EIPTV-ELTFDRA-----	51
<i>Nomascus leucogenys</i> ADIQ	20	MGTA---TLG--PLWA--VLLLFLLMC--EIPTV-ELTFDRA-----	51
<i>Macaca mulatta</i> ADIQ	20	MGTA---ALG--PLWA--VLLLFLLMC--EVPKV-ELTFDRA-----	51
<i>Mus musculus</i> Adiq	5	MGIA---SIG--FLWA--VFLLPLVVF--GVPTE-ETTFGES-----	35
<i>Rattus norvegicus</i> Adiq	5	MGTA---SIG--SIWA--VFLLPLVVF--GVPTE-EPTFGES-----	35
<i>Homo sapiens</i> ADIR	1	M--TP---VDV--PVTN----PAA-----TI-----	15
<i>Pan troglodytes</i> ADIR	1	M--TP---VDV--PVTN----PAA-----TI-----	15
<i>Pongo abelii</i> ADIR	1	M--TP---VDV--PVTN----PAA-----TI-----	15
<i>Nomascus leucogenys</i> ADIR	1	M--TP---VDV--PVTN----PAA-----TI-----	15
<i>Macaca mulatta</i> ADIR	1	M--TP---VDV--PVTN----PAA-----TI-----	15
<i>Papio hamadryas</i> ADIR	1	M--TP---VDV--PVTN----PAA-----TI-----	15
<i>Callithrix jacchus</i> ADIR	1	M--TP---VDV--PVSN----PAA-----TI-----	15
<i>Tarsius syrichta</i> ADIR	1	M--TP---VDV--PVTN----PAA-----TI-----	15
<i>Otolemur garnettii</i> ADIR	1	M--TP---VDV--PVTN----PAA-----TV-----	15
<i>Tupaia belangeri</i> ADIR	1	M--TP---VDV--PVTN----PAA-----TI-----	15
<i>Mus musculus</i> Adir	1	M--TP---VDV--PVTS----PAA-----AI-----	15
<i>Rattus norvegicus</i> Adir	1	M--TP---VDV--PVTS----PAA-----AI-----	15
<i>Cavia porcellus</i> ADIR	1	M--TP---VDV--PVTN----PAA-----TL-----	15
<i>Oryctolagus cuniculus</i> ADIR	1	M--TP---VDV--PVTN----PAA-----TI-----	15
<i>Tursiops truncatus</i> ADIR	1	M--TP---VDV--PVTN----PAA-----TI-----	15
<i>Bos taurus</i> ADIR	1	M--TP---VDV--PVTN----PAA-----TI-----	15
<i>Equus caballus</i> ADIR	1	M--TP---VDV--PVTN----PAA-----TI-----	15
<i>Canis lupus familiaris</i> ADIR	1	M--TP---VDV--PVTN----PAA-----TI-----	15
<i>Myotis lucifugus</i> ADIR	1	M--TP---VDV--PVTN----PAA-----TI-----	15
<i>Pteropus vampyrus</i> ADIR	1	M--TP---VDV--PVTS----PAA-----TI-----	15
<i>Erinaceus europaeus</i> ADIR	-	-	-
<i>Dasyops novemcinctus</i> ADIR	1	M--TP---VDV--PVTS----PAT-----TI-----	15
<i>Choloepus hoffmanni</i> ADIR	1	M--TP---VDV--PVTN----PAA-----TI-----	15
<i>Loxodonta africana</i> ADIR	1	M--TP---VDV--PVTN----PAA-----TI-----	15

<i>Homo sapiens</i> ADIA	30	-----	Sc	-----	31		
		190	200	210	220	230	240
<i>Homo sapiens</i> ADIA	30	-----	Sc	-----	31		
<i>Papio hamadryas</i> ADIA	30	-----	Sc	-----	31		
<i>Mus musculus</i> Adia	57	-----	Sc	-----	58		
<i>Rattus norvegicus</i> Adia	28	-----	Sc	-----	29		
<i>Cavia porcellus</i> ADIA	28	-----	Sc	-----	29		
<i>Ochotona princeps</i> ADIA	28	-----	Sc	-----	29		
<i>Bos taurus</i> ADIA	25	-----	Nc	-----	26		
<i>Equus caballus</i> ADIA	29	-----	Sc	-----	30		
<i>Canis lupus familiaris</i> ADIA	27	-----	Sc	-----	28		
<i>Felis catus</i> ADIA	31	-----	Sc	-----	32		
<i>Myotis lucifugus</i> ADIA	28	-----	Dc	-----	29		
<i>Dasytus novemcinctus</i> ADIA	25	-----	Sc	-----	26		
<i>Loxodonta africana</i> ADIA	28	-----	Sc	-----	29		
<i>Homo sapiens</i> ADIB	31	-----	Gc	-----	32		
<i>Pan troglodytes</i> ADIB	31	-----	Gc	-----	32		
<i>Pongo abelii</i> ADIB	31	-----	Gc	-----	32		
<i>Nomascus leucogenys</i> ADIB	32	-----	Gc	-----	33		
<i>Callithrix jacchus</i> ADIB	30	-----	Gc	-----	31		
<i>Otolemur garnettii</i> ADIB	29	-----	Gc	-----	30		
<i>Mus musculus</i> Adib	62	-----	Gc	-----	63		
<i>Rattus norvegicus</i> Adib	54	-----	Gc	-----	55		
<i>Cavia porcellus</i> ADIB	78	-----	Gc	-----	79		
<i>Oryctolagus cuniculus</i> ADIB	84	-----	Dc	-----	85		
<i>Bos taurus</i> ADIB	29	-----	Yc	-----	30		
<i>Equus caballus</i> ADIB	49	-----	Dc	-----	50		
<i>Canis lupus familiaris</i> ADIB	31	-----	Gc	-----	32		
<i>Myotis lucifugus</i> ADIB	31	-----	Ec	-----	32		
<i>Loxodonta africana</i> ADIB	29	-----	Sc	-----	30		
<i>Homo sapiens</i> ADIC	25	-----	Lc	-----	26		
<i>Macaca mulatta</i> ADIC	25	-----	Vc	-----	26		
<i>Papio hamadryas</i> ADIC	25	-----	Vc	-----	26		
<i>Callithrix jacchus</i> ADIC	25	-----	Vc	-----	26		
<i>Mus musculus</i> Adic	25	-----	Vc	-----	26		
<i>Rattus norvegicus</i> Adic	37	-----	Vc	-----	38		
<i>Cavia porcellus</i> ADIC	24	-----	Vc	-----	25		
<i>Oryctolagus cuniculus</i> ADIC	66	-----	Vc	-----	67		
<i>Equus caballus</i> ADIC	58	-----	Vc	-----	59		
<i>Canis lupus familiaris</i> ADIC	44	-----	Vc	-----	45		
<i>Myotis lucifugus</i> ADIC	25	-----	Vc	-----	26		
<i>Loxodonta africana</i> ADIC	40	-----	Tc	-----	41		
<i>Homo sapiens</i> ADID	58	-----	VLLPLPKGAC	-----	67		
<i>Pan troglodytes</i> ADID	58	-----	VLLPLPKGAC	-----	67		
<i>Pongo abelii</i> ADID	27	-----	VLLPLPKGAC	-----	36		
<i>Nomascus leucogenys</i> ADID	57	-----	VLLPLPKGAC	-----	66		
<i>Macaca mulatta</i> ADID	56	-----	VLLPLPKGAC	-----	65		
<i>Otolemur garnettii</i> ADID	27	-----	VGLPLPKGAC	-----	36		
<i>Mus musculus</i> Adid	40	-----	PALVPPPKGTC	-----	50		
<i>Rattus norvegicus</i> Adid	27	-----	ALVPPPKETC	-----	36		
<i>Cavia porcellus</i> ADID	69	-----	VPLLLPKGAC	-----	78		
<i>Oryctolagus cuniculus</i> ADID	37	-----	VLIPAPKGAC	-----	46		
<i>Bos taurus</i> ADID	25	-----	PLPKGAC	-----	31		
<i>Equus caballus</i> ADID	87	-----	TLPKEGC	-----	93		
<i>Canis lupus familiaris</i> ADID	36	-----	VLLPLPKGAC	-----	45		
<i>Felis catus</i> ADID	27	-----	VVVPLPKGAC	-----	36		
<i>Myotis lucifugus</i> ADID	36	-----	VQLPLPKGVC	-----	45		
<i>Dasytus novemcinctus</i> ADID	28	-----	VLLLPKGAC	-----	37		
<i>Loxodonta africana</i> ADID	27	-----	VLLSPPKERc	-----	36		
<i>Homo sapiens</i> ADIE	22	-----	NKI-PSL-C	-----	28		
<i>Pan troglodytes</i> ADIE	22	-----	NKI-PSL-C	-----	28		
<i>Pongo abelii</i> ADIE	22	-----	NKI-PSL-C	-----	28		
<i>Papio hamadryas</i> ADIE	22	-----	NKI-PSL-C	-----	28		
<i>Callithrix jacchus</i> ADIE	22	-----	NKI-PSL-C	-----	28		
<i>Otolemur garnettii</i> ADIE	22	-----	NKI-PSL-C	-----	28		
<i>Mus musculus</i> Adie	22	-----	NKI-PSL-C	-----	28		
<i>Rattus norvegicus</i> Adie	22	-----	NKI-PSL-C	-----	28		
<i>Homo sapiens</i> ADIF1	22	-----	Tc	-----	23		
<i>Homo sapiens</i> ADIF2	22	-----	Tc	-----	23		
<i>Pan troglodytes</i> ADIF1	22	-----	Tc	-----	23		
<i>Pongo abelii</i> ADIF1	22	-----	Tc	-----	23		
<i>Nomascus leucogenys</i> ADIF1	22	-----	Tc	-----	23		
<i>Macaca mulatta</i> ADIF1	22	-----	Tc	-----	23		
<i>Papio hamadryas</i> ADIF1	22	-----	Tc	-----	23		

<i>Microcebus murinus</i> ADIF1	22	-----TC-----	23
<i>Otolemur garnettii</i> ADIF1	22	-----TC-----	23
<i>Mus musculus</i> Adif1	51	-----TC-----	52
<i>Rattus norvegicus</i> Adif1	38	-----TC-----	39
<i>Cavia porcellus</i> ADIF1	22	-----TC-----	23
<i>Oryctolagus cuniculus</i> ADIF1	22	-----TC-----	23
<i>Ochotona princeps</i> ADIF1	22	-----TC-----	23
<i>Bos taurus</i> ADIF1	22	-----TC-----	23
<i>Equus caballus</i> ADIF1	22	-----TC-----	23
<i>Canis lupus familiaris</i> ADIF1	22	-----TC-----	23
<i>Felis catus</i> ADIF1	22	-----TC-----	23
<i>Dasyopus novemcinctus</i> ADIF1	23	-----TC-----	24
<i>Loxodonta africana</i> ADIF1	22	-----MC-----	23
<i>Homo sapiens</i> ADIG	81	-----NYSPLYIC-----	88
<i>Pan troglodytes</i> ADIG	81	-----NYSPLYIC-----	88
<i>Pongo abelii</i> ADIG	81	-----NYSPLYIC-----	88
<i>Callithrix jacchus</i> ADIG	67	-----NYSPLYIC-----	74
<i>Otolemur garnettii</i> ADIG	27	-----NYSPLYIC-----	34
<i>Mus musculus</i> Adig	69	-----SYSPRYIC-----	76
<i>Rattus norvegicus</i> Adig	70	-----SYSPRYIC-----	77
<i>Cavia porcellus</i> ADIG	27	-----SYSPRYIC-----	34
<i>Oryctolagus cuniculus</i> ADIG	27	-----SYTPRYIC-----	34
<i>Tursiops truncatus</i> ADIG	79	-----SYSPRYIC-----	86
<i>Bos taurus</i> ADIG	27	-----SYSPRYIC-----	34
<i>Equus caballus</i> ADIG	68	-----SYSPRYIC-----	75
<i>Canis lupus familiaris</i> ADIG	68	-----SYSPRYIC-----	75
<i>Myotis lucifugus</i> ADIG	27	-----SYAPRYIC-----	34
<i>Homo sapiens</i> ADIH	27	-----FRKGSPQLVC-----	36
<i>Pan troglodytes</i> ADIH	27	-----FRKGSPQLIC-----	36
<i>Pongo abelii</i> ADIH	27	-----FRKSSPQLVC-----	36
<i>Nomascus leucogenys</i> ADIH	27	-----FRKGSPQLVC-----	36
<i>Macaca mulatta</i> ADIH	27	-----FRKGSPQLVC-----	36
<i>Papio hamadryas</i> ADIH	27	-----FRKGSPQLVC-----	36
<i>Mus musculus</i> Adih	34	-----FQKGGPQLVC-----	43
<i>Rattus norvegicus</i> Adih	71	-----FQKGGPQLVC-----	80
<i>Dipodomys ordii</i> ADIH	27	-----FQKGAPQLIC-----	36
<i>Cavia porcellus</i> ADIH	27	-----FQKGGPQLVC-----	36
<i>Bos taurus</i> ADIH	44	-----FQKGGPQLIC-----	53
<i>Equus caballus</i> ADIH	27	-----FQKGGPQLVC-----	36
<i>Canis lupus familiaris</i> ADIH	27	-----FQKGGPQLVC-----	36
<i>Pteropus vampyrus</i> ADIH	27	-----FQKSSQLVC-----	36
<i>Loxodonta africana</i> ADIH	27	-----IKKGGPQLIC-----	36
<i>Homo sapiens</i> ADII	27	-----GTCRMIC-DP-YTAA-PGGEPGAKAQP	51
<i>Pongo abelii</i> ADII	27	-----GTCRMIC-DP-YTAA-PGGGPAGAKAQP	51
<i>Macaca mulatta</i> ADII	27	-----GTCRMIC-DP-YTAA-PGGGPAGAKAQP	51
<i>Mus musculus</i> Adii	27	-----GTCRMIC-DP-YSVA-PAGGPAGAKAPP	51
<i>Rattus norvegicus</i> Adii	27	-----GTCRMIC-DP-YTVS-PAGGPAGAKAPP	51
<i>Bos taurus</i> ADII	27	-----GTCRMIC-DP-YTAA-PGAGPAGAKAPP	51
<i>Canis lupus familiaris</i> ADII	27	-----GTCRMIC-DP-YGAA-PAGGPAGAKAPP	51
<i>Dasyopus novemcinctus</i> ADII	27	-----GTCRMIC-DP-YSAS-PGGGPAGAKAPP	51
<i>Homo sapiens</i> ADIJ	26	-----GTCRMVC-DP-YG-----GTKA--	40
<i>Pan troglodytes</i> ADIJ	26	-----GTCRMVC-DP-YG-----GTKA--	40
<i>Papio hamadryas</i> ADIJ	26	-----GTCRMVC-DP-YG-----GTKA--	40
<i>Mus musculus</i> Adij	26	-----GTCRMVC-DP-YG-----GTKA--	40
<i>Rattus norvegicus</i> Adij	26	-----GTCRMVC-DP-YG-----GTKA--	40
<i>Oryctolagus cuniculus</i> ADIJ	26	-----GTCRMVC-DP-YG-----GTKA--	40
<i>Bos taurus</i> ADIJ	26	-----GTCRMVC-DP-YG-----GTKA--	40
<i>Canis lupus familiaris</i> ADIJ	26	-----GTCRMVC-DP-YG-----GTKA--	40
<i>Loxodonta africana</i> ADIJ	26	-----GTCRMVC-DP-YG-----GTKA--	40
<i>Homo sapiens</i> ADIK	26	-----GRCRMVC-DP-H-----	35
<i>Pan troglodytes</i> ADIK	26	-----GRCRMVC-DP-H-----	35
<i>Gorilla gorilla</i> ADIK	26	-----GRCRMVC-DP-H-----	35
<i>Papio hamadryas</i> ADIK	26	-----GRCRMVC-DP-H-----	35
<i>Callithrix jacchus</i> ADIK	26	-----GRCRMVC-DP-H-----	35
<i>Rattus norvegicus</i> Adik	26	-----GRCRMVC-DP-H-----	35
<i>Cavia porcellus</i> ADIK	26	-----GRCRMVC-DP-H-----	35
<i>Equus caballus</i> ADIK	26	-----GRCRMVC-DP-H-----	35
<i>Canis lupus familiaris</i> ADIK	26	-----GRCRMVC-DP-H-----	35
<i>Dasyopus novemcinctus</i> ADIK	26	-----GRCRMVC-DP-H-----	35
<i>Loxodonta africana</i> ADIK	26	-----GRCRMVC-DP-H-----	35
<i>Mus musculus</i> Adil	26	-----GTCRMVC-DP-YPARGPGA---GARSD-	47
<i>Rattus norvegicus</i> Adil	26	-----GTCRMVC-DP-YPARGPGA---GARSD-	47
<i>Homo sapiens</i> ADIM	146	-----LP-PDCSK-CC---H-----	155
<i>Pan troglodytes</i> ADIM	146	-----LP-PDCSK-CC---H-----	155

<i>Pongo abelii</i> ADIM	102	-----LP-PDCSK-CC---H-----	111
<i>Nomascus leucogenys</i> ADIM	146	-----LP-PDCSK-CC---H-----	155
<i>Papio hamadryas</i> ADIM	146	-----LP-PDCSK-CC---H-----	155
<i>Callithrix jacchus</i> ADIM	136	-----MA-PDCSK-CC---H-----	145
<i>Mus musculus</i> Adim	35	-----LP-PDCSK-CC---H-----	44
<i>Rattus norvegicus</i> Adim	109	-----LP-PDCSK-CC---H-----	118
<i>Cavia porcellus</i> ADIM	102	-----LP-PDCSK-CC---H-----	111
<i>Bos taurus</i> ADIM	35	-----LP-PDCSK-CC---H-----	44
<i>Equus caballus</i> ADIM	35	-----LP-PDCSK-CC---H-----	44
<i>Canis lupus familiaris</i> ADIM	96	-----LP-PDCSK-CC---H-----	105
<i>Homo sapiens</i> ADIN	-	-----	-
<i>Pan troglodytes</i> ADIN	-	-----	-
<i>Pongo abelii</i> ADIN	-	-----	-
<i>Nomascus leucogenys</i> ADIN	-	-----	-
<i>Macaca mulatta</i> ADIN	-	-----	-
<i>Callithrix jacchus</i> ADIN	-	-----	-
<i>Mus musculus</i> Adin	-	-----	-
<i>Cavia porcellus</i> ADIN	-	-----	-
<i>Tursiops truncatus</i> ADIN	-	-----	-
<i>Canis lupus familiaris</i> ADIN	-	-----	-
<i>Dasyopus novemcinctus</i> ADIN	-	-----	-
<i>Loxodonta africana</i> ADIN	-	-----	-
<i>Homo sapiens</i> ADIO	22	-----PRRPCVH-CCRPAPW---PG--P-YARVS-	43
<i>Pan troglodytes</i> ADIO	22	-----PRRPCVH-CCRPAPW---PG--P-YARVS-	43
<i>Macaca mulatta</i> ADIO	22	-----PRRPCVH-CCHPAWP---PG--P-YARVS-	43
<i>Bos taurus</i> ADIO	21	-----GLPRRPCVQ-CCHPAWPPAAPG--P-GAHVS-	47
<i>Myotis lucifugus</i> ADIO	21	-----GPPHRPCVH-CCHPAWPPAAPG--S-YTPEG-	47
<i>Homo sapiens</i> ADIP	137	GTEELPSPPDHAERAEEOHEKYRPSQDQGLPASRCLR-CCDPGTS---MY--P-ATAV--	187
<i>Otolemur garnettii</i> ADIP	39	GTKEPPTPPDHTDRAEEKHEKYRPSQGEELPTSQCFR-CCDPAAP---LY--P-VAPV--	89
<i>Mus musculus</i> Adip	39	ETEELPSPLDPVTRPEETREKYSRQGEDLPTSRCYR-CCDPSTP---VY--Q-TIPP--	89
<i>Cavia porcellus</i> ADIP	39	GTQKPPPLMDHAERDEDKHEKYSTSLGEELPASQCFR-CCDPGTP---VY--Q-GIPV--	89
<i>Bos taurus</i> ADIP	64	GTREPP--MDHAERDEEEHEKYGPRQDEEAPASRCLR-CCDPGTP---VY--Q-AIPV--	112
<i>Equus caballus</i> ADIP	39	GTREPP--LDPARTTEKHEKYNPKQGEETASRCLR-CCDPGTP---VY--Q-AIPV--	87
<i>Loxodonta africana</i> ADIP	91	GTKEPPPPRGHPERAEEHEKYSPRQAEPPASRCLR-CCDPSAP---VY--Q-PIPV--	141
<i>Homo sapiens</i> ADIQ	52	-----VAS----G-CQR-CCDSEDP---LD--P--AHVS-	72
<i>Pan troglodytes</i> ADIQ	52	-----VAS----G-CQR-CCDSEDP---LD--P--AHVS-	72
<i>Pongo abelii</i> ADIQ	52	-----VAS----G-CQR-CCDSEDP---LD--P--AHVS-	72
<i>Nomascus leucogenys</i> ADIQ	52	-----VAS----S-CQR-CCDSEDP---LD--P--AHVS-	72
<i>Macaca mulatta</i> ADIQ	52	-----VAS----G-CQR-CCDSEDP---LD--P--AHVS-	72
<i>Mus musculus</i> Adiq	36	-----VASHLPKG-CRR-CCDPEDL---MS--S--DDTV-	60
<i>Rattus norvegicus</i> Adiq	36	-----VASHLPKN-CQR-CCDPEDP---LS--P--ADTV-	60
<i>Homo sapiens</i> ADIR	-	-----	-
<i>Pan troglodytes</i> ADIR	-	-----	-
<i>Pongo abelii</i> ADIR	-	-----	-
<i>Nomascus leucogenys</i> ADIR	-	-----	-
<i>Macaca mulatta</i> ADIR	-	-----	-
<i>Papio hamadryas</i> ADIR	-	-----	-
<i>Callithrix jacchus</i> ADIR	-	-----	-
<i>Tarsius syrichta</i> ADIR	-	-----	-
<i>Otolemur garnettii</i> ADIR	-	-----	-
<i>Tupaia belangeri</i> ADIR	-	-----	-
<i>Mus musculus</i> Adir	-	-----	-
<i>Rattus norvegicus</i> Adir	-	-----	-
<i>Cavia porcellus</i> ADIR	-	-----	-
<i>Oryctolagus cuniculus</i> ADIR	-	-----	-
<i>Tursiops truncatus</i> ADIR	-	-----	-
<i>Bos taurus</i> ADIR	-	-----	-
<i>Equus caballus</i> ADIR	-	-----	-
<i>Canis lupus familiaris</i> ADIR	-	-----	-
<i>Myotis lucifugus</i> ADIR	-	-----	-
<i>Pteropus vampyrus</i> ADIR	-	-----	-
<i>Erinaceus europaeus</i> ADIR	-	-----	-
<i>Dasyopus novemcinctus</i> ADIR	-	-----	-
<i>Choloepus hoffmanni</i> ADIR	-	-----	-
<i>Loxodonta africana</i> ADIR	-	-----	-

<i>Homo sapiens</i> ADIA	32	-----TGP-PAIPGIP-----	GIP	44
<i>Homo sapiens</i> ADIA	32	-----250-----260-----270-----280-----290-----300-----	GIP	44
<i>Papio hamadryas</i> ADIA	32	-----TGP-PAIPGTP-----	GIP	44
<i>Mus musculus</i> Adia	59	-----TGP-PGIPGIP-----	GVP	71
<i>Rattus norvegicus</i> Adia	30	-----TGS-PGIPGVP-----	GIP	42
<i>Cavia porcellus</i> ADIA	30	-----VGH-PAIPGIP-----	GIP	42
<i>Ochotona princeps</i> ADIA	30	-----SGH-PAIPGTP-----	GIP	42
<i>Bos taurus</i> ADIA	27	-----I-R-PSIPGIP-----	GIP	38
<i>Equus caballus</i> ADIA	31	-----PAS-QGIPGIP-----	GIP	43
<i>Canis lupus familiaris</i> ADIA	29	-----TGH-PAIPGIP-----	GIP	41
<i>Felis catus</i> ADIA	33	-----TGH-PAIPGIP-----	GIP	45
<i>Myotis lucifugus</i> ADIA	30	-----TGP-AAIPGIP-----	GIP	42
<i>Dasyopus novemcinctus</i> ADIA	27	-----TGP-ATIPGTP-----	GIP	39
<i>Loxodonta africana</i> ADIA	30	-----SGP-RTIPGIP-----	GIP	42
<i>Homo sapiens</i> ADIB	33	-----Y-----GIP-----	GMP	39
<i>Pan troglodytes</i> ADIB	33	-----Y-----GIP-----	GMP	39
<i>Pongo abelii</i> ADIB	33	-----Y-----GIP-----	GMP	39
<i>Nomascus leucogenys</i> ADIB	34	-----Y-----GIP-----	GMP	40
<i>Callithrix jacchus</i> ADIB	32	-----Y-----GIP-----	GMP	38
<i>Otolemur garnettii</i> ADIB	31	-----Y-----GIP-----	GMP	37
<i>Mus musculus</i> Adib	64	-----Y-----GIP-----	GMP	70
<i>Rattus norvegicus</i> Adib	56	-----Y-----GIP-----	GMP	62
<i>Cavia porcellus</i> ADIB	80	-----Y-----GIP-----	GMP	86
<i>Oryctolagus cuniculus</i> ADIB	86	-----Y-----GIP-----	GMP	92
<i>Bos taurus</i> ADIB	31	-----Y-----GIP-----	GMP	37
<i>Equus caballus</i> ADIB	51	-----Y-----GIP-----	GMP	57
<i>Canis lupus familiaris</i> ADIB	33	-----Y-----GIP-----	GMP	39
<i>Myotis lucifugus</i> ADIB	33	-----Y-----GIP-----	GMP	39
<i>Loxodonta africana</i> ADIB	31	-----Y-----GIP-----	GMP	37
<i>Homo sapiens</i> ADIC	27	-----RAP-D---GKK-----	GEA	36
<i>Macaca mulatta</i> ADIC	27	-----RAP-D---GKN-----	GVA	36
<i>Papio hamadryas</i> ADIC	27	-----RAP-D---GKN-----	GVA	36
<i>Callithrix jacchus</i> ADIC	27	-----QAP-N---GKD-----	GVA	36
<i>Mus musculus</i> Adic	27	-----RAP-N---GKD-----	GAP	36
<i>Rattus norvegicus</i> Adic	39	-----RAP-N---GKD-----	GVA	48
<i>Cavia porcellus</i> ADIC	26	-----RAP-N---GKD-----	GAA	35
<i>Oryctolagus cuniculus</i> ADIC	68	-----RAP-D---GKD-----	GAA	77
<i>Equus caballus</i> ADIC	60	-----RAL-N---GKD-----	GAP	69
<i>Canis lupus familiaris</i> ADIC	46	-----RAL-D---GRD-----	GAA	55
<i>Myotis lucifugus</i> ADIC	27	-----RAP-D---GRD-----	GVA	36
<i>Loxodonta africana</i> ADIC	42	-----RAP-D---GTD-----	GTP	51
<i>Homo sapiens</i> ADID	68	-----TG---WMAGIP-----	GHP	78
<i>Pan troglodytes</i> ADID	68	-----TG---WMAGIP-----	GHP	78
<i>Pongo abelii</i> ADID	37	-----TG---WMAGIP-----	GHP	47
<i>Nomascus leucogenys</i> ADID	67	-----TG---WMAGIP-----	GHP	77
<i>Macaca mulatta</i> ADID	66	-----TG---WMAGIP-----	GHP	76
<i>Otolemur garnettii</i> ADID	37	-----MG---WMAGIP-----	GHP	47
<i>Mus musculus</i> Adid	51	-----AG---WMAGIP-----	GHP	61
<i>Rattus norvegicus</i> Adid	37	-----AG---WMAGIP-----	GYP	47
<i>Cavia porcellus</i> ADID	79	-----AG---WMAGIP-----	GHP	89
<i>Oryctolagus cuniculus</i> ADID	47	-----AG---WIAGIP-----	GHP	57
<i>Bos taurus</i> ADID	32	-----AG---WMAGIP-----	GHP	42
<i>Equus caballus</i> ADID	94	-----AG---WMAGIP-----	GHP	104
<i>Canis lupus familiaris</i> ADID	46	-----PG---WMAGIP-----	GHP	56
<i>Felis catus</i> ADID	37	-----TG---WMAGIP-----	GHP	47
<i>Myotis lucifugus</i> ADID	46	-----TG---WVAGIP-----	GHP	56
<i>Dasyopus novemcinctus</i> ADID	38	-----V-----IAGIP-----	GLP	46
<i>Loxodonta africana</i> ADID	37	-----AG---WMAGIP-----	GHP	47
<i>Homo sapiens</i> ADIE	29	-----PGHP-----	GLP	35
<i>Pan troglodytes</i> ADIE	29	-----PGHP-----	GLP	35
<i>Pongo abelii</i> ADIE	29	-----PGHP-----	GLP	35
<i>Papio hamadryas</i> ADIE	29	-----PGHP-----	GLP	35
<i>Callithrix jacchus</i> ADIE	29	-----PGHP-----	GLP	35
<i>Otolemur garnettii</i> ADIE	29	-----PGHP-----	GLP	35
<i>Mus musculus</i> Adie	29	-----PGQP-----	GLP	35
<i>Rattus norvegicus</i> Adie	29	-----PGQP-----	GLP	35
<i>Homo sapiens</i> ADIF1	24	-----RQHP-----	GIP	31
<i>Homo sapiens</i> ADIF2	24	-----RQHP-----	GIP	31
<i>Pan troglodytes</i> ADIF1	24	-----RQHP-----	GIP	31
<i>Pongo abelii</i> ADIF1	24	-----RQHP-----	GIP	31
<i>Nomascus leucogenys</i> ADIF1	24	-----RQHP-----	GIP	31
<i>Macaca mulatta</i> ADIF1	24	-----RQHP-----	GIP	31
<i>Papio hamadryas</i> ADIF1	24	-----RQHP-----	GIP	31

<i>Microcebus murinus</i> ADIF1	24	-----RQGHP-----	GVP	31		
<i>Otolemur garnettii</i> ADIF1	24	-----RQGPS-----	GIP	31		
<i>Mus musculus</i> Adif1	53	-----RQGHS-----	GIP	60		
<i>Rattus norvegicus</i> Adif1	40	-----RQGHS-----	GIP	47		
<i>Cavia porcellus</i> ADIF1	24	-----RQGHS-----	GIP	31		
<i>Oryctolagus cuniculus</i> ADIF1	24	-----RQGHP-----	GIP	31		
<i>Ochotona princeps</i> ADIF1	24	-----RQGHP-----	GMP	31		
<i>Bos taurus</i> ADIF1	24	-----KQGHP-----	GIP	31		
<i>Equus caballus</i> ADIF1	24	-----RQGHP-----	GIP	31		
<i>Canis lupus familiaris</i> ADIF1	24	-----RQGHP-----	GIP	31		
<i>Felis catus</i> ADIF1	24	-----RQGHP-----	GVP	31		
<i>Dasyopus novemcinctus</i> ADIF1	25	-----RQGHP-----	GIP	32		
<i>Loxodonta africana</i> ADIF1	24	-----RQGHS-----	GIP	31		
<i>Homo sapiens</i> ADIG	89	-----S----IPGLP-----	GPP	97		
<i>Pan troglodytes</i> ADIG	89	-----S----IPGLP-----	GPP	97		
<i>Pongo abelii</i> ADIG	89	-----S----IPGLP-----	GPP	97		
<i>Callithrix jacchus</i> ADIG	75	-----S----IPGLP-----	GPP	83		
<i>Otolemur garnettii</i> ADIG	35	-----S----IPGLP-----	GPP	43		
<i>Mus musculus</i> Adig	77	-----S----IPGLP-----	GPP	85		
<i>Rattus norvegicus</i> Adig	78	-----S----IPGLP-----	GPP	86		
<i>Cavia porcellus</i> ADIG	35	-----S----IPGLP-----	GPP	43		
<i>Oryctolagus cuniculus</i> ADIG	35	-----S----IPGLP-----	GPP	43		
<i>Tursiops truncatus</i> ADIG	87	-----S----IPGLP-----	GPP	95		
<i>Bos taurus</i> ADIG	35	-----S----IPGLP-----	GPP	43		
<i>Equus caballus</i> ADIG	76	-----S----IPGLP-----	GPP	84		
<i>Canis lupus familiaris</i> ADIG	76	-----S----IPGLP-----	GPP	84		
<i>Myotis lucifugus</i> ADIG	35	-----S----IPGLP-----	GPP	43		
<i>Homo sapiens</i> ADIH	37	-----S----LPGPQ-----	GPP	45		
<i>Pan troglodytes</i> ADIH	37	-----S----LPGPQ-----	GPP	45		
<i>Pongo abelii</i> ADIH	37	-----S----LPGPQ-----	GPP	45		
<i>Nomascus leucogenys</i> ADIH	37	-----S----LPGPQ-----	GPP	45		
<i>Macaca mulatta</i> ADIH	37	-----S----LPGPQ-----	GPP	45		
<i>Papio hamadryas</i> ADIH	37	-----S----LPGPQ-----	GPP	45		
<i>Mus musculus</i> Adih	44	-----S----LPGPQ-----	GPP	52		
<i>Rattus norvegicus</i> Adih	81	-----S----LPGPQ-----	GPP	89		
<i>Dipodomys ordii</i> ADIH	37	-----S----LPGPQ-----	GPP	45		
<i>Cavia porcellus</i> ADIH	37	-----S----LPGPQ-----	GPP	45		
<i>Bos taurus</i> ADIH	54	-----S----MPGPQ-----	GPP	62		
<i>Equus caballus</i> ADIH	37	-----S----LPGPQ-----	GPP	45		
<i>Canis lupus familiaris</i> ADIH	37	-----S----LPGPQ-----	GPP	45		
<i>Pteropus vampyrus</i> ADIH	37	-----S----LPGPQ-----	GPP	45		
<i>Loxodonta africana</i> ADIH	37	-----S----MPGPQ-----	GPP	45		
<i>Homo sapiens</i> ADII	52	PGPSTAA-LEVMQDLSANPPP-PFIQGP	GDPGRP	90		
<i>Pongo abelii</i> ADII	52	PGPSTAA-LEVMQDLSANPPP-PFIQGP	GDPGRP	90		
<i>Macaca mulatta</i> ADII	52	PGPSTAA-LEVMQDLSANPPP-PFIQGP	GDPGRP	90		
<i>Mus musculus</i> Adii	52	PGPSTAA-LEVMQDLSANPPP-PFIQGP	GDPGRP	90		
<i>Rattus norvegicus</i> Adii	52	PGPSTAA-LEVMQDLSANPPP-PFIQGP	GDPGRP	90		
<i>Bos taurus</i> ADII	52	PGPSTAA-LEVMQDLSINPPP-PFIQGP	GDPGRP	90		
<i>Canis lupus familiaris</i> ADII	52	PGPSTAA-LEVMQDLSANPPP-PFIQGP	GDPGRP	90		
<i>Dasyopus novemcinctus</i> ADII	52	PGPSTAA-LEVMQDLSANPPP-PFIQGP	GDPGRP	90		
<i>Homo sapiens</i> ADIJ	41	--PSTAATPDRGLMQS-L--P-TFIQGP	GEAGRP	75		
<i>Pan troglodytes</i> ADIJ	41	--PSTAATPDRGLMQS-L--P-TFIQGP	GEAGRP	75		
<i>Papio hamadryas</i> ADIJ	41	--PSTAATPDRGLMQS-L--P-TFIQGP	GEAGRP	75		
<i>Mus musculus</i> Adij	41	--PSTAATPDRGLMQS-L--P-TFIQGP	GEAGRP	75		
<i>Rattus norvegicus</i> Adij	41	--PSTAATPDRGLMQS-L--P-TFIQGP	GEAGRP	75		
<i>Oryctolagus cuniculus</i> ADIJ	41	--PSTAATPDRGLMQS-L--P-TFIQGP	GEAGRP	75		
<i>Bos taurus</i> ADIJ	41	--PSTAATPDRGLMQS-L--P-TFIQGP	GEAGRP	75		
<i>Canis lupus familiaris</i> ADIJ	41	--PSTAATPDRGLMQS-L--P-TFIQGP	GEAGRP	75		
<i>Loxodonta africana</i> ADIJ	41	--PSTAATPDRGLMQS-L--P-TFIQGP	GEAGRP	75		
<i>Homo sapiens</i> ADIK	36	-----GPRGPGPDGAPASVPPFP	GPAKGEV	69		
<i>Pan troglodytes</i> ADIK	36	-----GPRGPGPDGAPASVPPFP	GPAKGEV	69		
<i>Gorilla gorilla</i> ADIK	36	-----GPRGPGPDGAPASVPPFP	GPAKGEV	69		
<i>Papio hamadryas</i> ADIK	36	-----GPRGPGPDGAPASVPPFP	GPAKGEV	69		
<i>Callithrix jacchus</i> ADIK	36	-----GPRGPGPDGAPASVPPFP	GPAKGEV	69		
<i>Rattus norvegicus</i> Adik	36	-----ASRQGS	SDGAPSSVPPFP	GPAKGEV	69	
<i>Cavia porcellus</i> ADIK	36	-----GPRGPGPDGAPASVPPFP	GPAKGEV	69		
<i>Equus caballus</i> ADIK	36	-----GPRGPGTDGAPASVPPYP	PGTKGEM	GRRGKAGLR	69	
<i>Canis lupus familiaris</i> ADIK	36	-----GPRGPGPDGAPASVPPFP	GPAKGEV	GRRGKAGLR	69	
<i>Dasyopus novemcinctus</i> ADIK	36	-----GPRGPDPEGAPASVPPFP	GPAKGET	GRRGKAGLR	69	
<i>Loxodonta africana</i> ADIK	36	-----GPRGPGPDGAPSSVPPFP	GPAKGEV	GRRGKAGLR	69	
<i>Mus musculus</i> Adil	48	GG-----DALSEQS	GAPPPSTLVQGPQ	-----GKPGRT	GKPGPP	81
<i>Rattus norvegicus</i> Adil	48	GG-----DALSEQS	GAPPPSTLVQGPQ	-----GKPGRT	GKPGPP	81
<i>Homo sapiens</i> ADIM	156	-----GDY-----	-----	-----	-----	158
<i>Pan troglodytes</i> ADIM	156	-----GDY-----	-----	-----	-----	158

<i>Pongo abelii</i> ADIM	112	----	GDY	-----	114
<i>Nomascus leucogenys</i> ADIM	156	----	GDY	-----	158
<i>Papio hamadryas</i> ADIM	156	----	GDY	-----	158
<i>Callithrix jacchus</i> ADIM	146	----	GDY	-----	148
<i>Mus musculus</i> Adim	45	----	GDY	-----	47
<i>Rattus norvegicus</i> Adim	119	----	GDY	-----	121
<i>Cavia porcellus</i> ADIM	112	----	GDY	-----	114
<i>Bos taurus</i> ADIM	45	----	GDY	-----	47
<i>Equus caballus</i> ADIM	45	----	GDY	-----	47
<i>Canis lupus familiaris</i> ADIM	106	----	GEY	-----	108
<i>Homo sapiens</i> ADIN	-	----		-----	-
<i>Pan troglodytes</i> ADIN	-	----		-----	-
<i>Pongo abelii</i> ADIN	-	----		-----	-
<i>Nomascus leucogenys</i> ADIN	-	----		-----	-
<i>Macaca mulatta</i> ADIN	-	----		-----	-
<i>Callithrix jacchus</i> ADIN	-	----		-----	-
<i>Mus musculus</i> Adin	-	----		-----	-
<i>Cavia porcellus</i> ADIN	-	----		-----	-
<i>Tursiops truncatus</i> ADIN	-	----		-----	-
<i>Canis lupus familiaris</i> ADIN	-	----		-----	-
<i>Dasyopus novemcinctus</i> ADIN	-	----		-----	-
<i>Loxodonta africana</i> ADIN	-	----		-----	-
<i>Homo sapiens</i> ADIO	44	DRDLWRGDLWRGLPRVRPTIDIEILK	----	-----	69
<i>Pan troglodytes</i> ADIO	44	DRDLWRGDLWRGLPRVRPTIDIEILK	----	-----	69
<i>Macaca mulatta</i> ADIO	44	D-----GDPWRSLPRVRPTIDIEILK	----	-----	64
<i>Bos taurus</i> ADIO	48	D-----GDAWAGLPRLRPTIDISILK	----	-----	68
<i>Myotis lucifugus</i> ADIO	48	E-----GEKWWQLPHVRPTIDISILK	----	-----	68
<i>Homo sapiens</i> ADIP	188	-----PQINITILK	-----	-----	196
<i>Otolemur garnettii</i> ADIP	90	-----PQINITILK	-----	-----	98
<i>Mus musculus</i> Adip	90	-----PQINITILK	-----	-----	98
<i>Cavia porcellus</i> ADIP	90	-----PQINITILK	-----	-----	98
<i>Bos taurus</i> ADIP	113	-----PQINITILK	-----	-----	121
<i>Equus caballus</i> ADIP	88	-----PQINITILK	-----	-----	96
<i>Loxodonta africana</i> ADIP	142	-----PQINITILK	-----	-----	150
<i>Homo sapiens</i> ADIQ	73	SASS-SGRPHA-LPEIRPYINITILK	-----	-----	96
<i>Pan troglodytes</i> ADIQ	73	SASS-SGRPHA-LPEIRPYINITILK	-----	-----	96
<i>Pongo abelii</i> ADIQ	73	SASS-SGPPYA-LPEIRPYINITILK	-----	-----	96
<i>Nomascus leucogenys</i> ADIQ	73	SASS-SGPPHA-LPEIRPYINITILK	-----	-----	96
<i>Macaca mulatta</i> ADIQ	73	SASS-SGLPHA-LPEIRPYINITILK	-----	-----	96
<i>Mus musculus</i> Adiq	61	QAP---VSPYV-LPEVRPYINITILK	-----	-----	82
<i>Rattus norvegicus</i> Adiq	61	NA---VPPYV-LPEVRPYINITILK	-----	-----	81
<i>Homo sapiens</i> ADIR	-	----		-----	-
<i>Pan troglodytes</i> ADIR	-	----		-----	-
<i>Pongo abelii</i> ADIR	-	----		-----	-
<i>Nomascus leucogenys</i> ADIR	-	----		-----	-
<i>Macaca mulatta</i> ADIR	-	----		-----	-
<i>Papio hamadryas</i> ADIR	-	----		-----	-
<i>Callithrix jacchus</i> ADIR	-	----		-----	-
<i>Tarsius syrichta</i> ADIR	-	----		-----	-
<i>Otolemur garnettii</i> ADIR	-	----		-----	-
<i>Tupaia belangeri</i> ADIR	-	----		-----	-
<i>Mus musculus</i> Adir	-	----		-----	-
<i>Rattus norvegicus</i> Adir	-	----		-----	-
<i>Cavia porcellus</i> ADIR	-	----		-----	-
<i>Oryctolagus cuniculus</i> ADIR	-	----		-----	-
<i>Tursiops truncatus</i> ADIR	-	----		-----	-
<i>Bos taurus</i> ADIR	-	----		-----	-
<i>Equus caballus</i> ADIR	-	----		-----	-
<i>Canis lupus familiaris</i> ADIR	-	----		-----	-
<i>Myotis lucifugus</i> ADIR	-	----		-----	-
<i>Pteropus vampyrus</i> ADIR	-	----		-----	-
<i>Erinaceus europaeus</i> ADIR	-	----		-----	-
<i>Dasyopus novemcinctus</i> ADIR	-	----		-----	-
<i>Choloepus hoffmanni</i> ADIR	-	----		-----	-
<i>Loxodonta africana</i> ADIR	-	----		-----	-

	45	GTP	-----	CPD	CP	-----	GTP	GIK	GEK	-----	G	63	
			310		320			330		340	350	360	
<i>Homo sapiens ADIA</i>	45	GTP	-----	CPD	CP	-----	GTP	GIK	GEK	-----	G	63	
<i>Homo sapiens ADIA</i>	45	GTP	-----	CPD	CP	-----	GTP	GIK	GEK	-----	G	63	
<i>Papio hamadryas ADIA</i>	45	GTP	-----	GSD	GQP	-----	GTP	GIK	GEK	-----	G	63	
<i>Mus musculus Adia</i>	72	GVP	-----	GSD	GQP	-----	GTP	GIK	GEK	-----	G	90	
<i>Rattus norvegicus Adia</i>	43	GVP	-----	GSD	GKP	-----	GTP	GIK	GEK	-----	G	61	
<i>Cavia porcellus ADIA</i>	43	GVP	-----	GSD	GQP	-----	GTP	GK	GEK	-----	G	61	
<i>Ochotona princeps ADIA</i>	43	GLP	-----	GSD	GNP	-----	GTP	GVK	GEK	-----	G	61	
<i>Bos taurus ADIA</i>	39	GKP	-----	GSD	GKP	-----	GTP	GK	GEK	-----	G	57	
<i>Equus caballus ADIA</i>	44	GSP	-----	GTD	GKP	-----	GTP	GK	GEK	-----	G	62	
<i>Canis lupus familiaris ADIA</i>	42	GAP	-----	GTD	GTP	-----	GTP	GK	GEK	-----	G	60	
<i>Felis catus ADIA</i>	46	GAP	-----	GSP	GTP	-----	GTP	GIK	GEK	-----	G	64	
<i>Myotis lucifugus ADIA</i>	43	GIP	-----	GSD	GTP	-----	GTP	GVK	GAK	-----	G	61	
<i>Dasytus novemcinctus ADIA</i>	40	GRP	-----	GSD	GQP	-----	GTP	GIK	GAK	-----	G	58	
<i>Loxodonta africana ADIA</i>	43	GPP	-----	GTN	GQP	-----	GTP	GIK	GEK	-----	G	61	
<i>Homo sapiens ADIB</i>	40	GLP	-----	GAP	GK	DGYDGL	PLG	PKGEP	-----	G	61		
<i>Pan troglodytes ADIB</i>	40	GLP	-----	GAP	GK	DGYDGL	PLG	PKGEP	-----	G	61		
<i>Pongo abelii ADIB</i>	40	GLP	-----	GAP	GK	DGYDGL	PLG	PKGEP	-----	G	61		
<i>Nomascus leucogenys ADIB</i>	41	GLP	-----	GAP	GK	DGYDGL	PLG	PKGEP	-----	G	62		
<i>Callithrix jacchus ADIB</i>	39	GLP	-----	GAP	GK	DGHDGL	PLG	PKGEP	-----	G	60		
<i>Otolemur garnettii ADIB</i>	38	GLP	-----	GAP	GK	DGHDGL	PLG	PKGEP	-----	G	59		
<i>Mus musculus Adib</i>	71	GMP	-----	GAP	GK	DGHDGL	Q	PKGEP	-----	G	92		
<i>Rattus norvegicus Adib</i>	63	GLP	-----	GTP	GK	DGHDGL	Q	PKGEP	-----	G	84		
<i>Cavia porcellus ADIB</i>	87	GLP	-----	GAP	GK	DGHDGL	R	PKGEP	-----	G	108		
<i>Oryctolagus cuniculus ADIB</i>	93	GLP	-----	GTP	GK	DGHDGL	PLG	PKGEP	-----	G	114		
<i>Bos taurus ADIB</i>	38	GLP	-----	GAP	GK	DGYDGL	PLG	PKGEP	-----	G	59		
<i>Equus caballus ADIB</i>	58	GMP	-----	GTP	GK	DGHDGL	PLG	PKGEP	-----	G	79		
<i>Canis lupus familiaris ADIB</i>	40	GLP	-----	GAP	GK	DGHDGL	PLG	PKGEP	-----	G	61		
<i>Myotis lucifugus ADIB</i>	40	GMP	-----	GAP	GK	DGHDGL	Q	PKGEP	-----	G	61		
<i>Loxodonta africana ADIB</i>	38	GLP	-----	GAP	GK	DGHDGL	PLG	PKGEP	-----	G	59		
<i>Homo sapiens ADIC</i>	37	GRP	-----	GRR	GRP	-----	GLK	G	EQGEP	-----	G	55	
<i>Macaca mulatta ADIC</i>	37	GRP	-----	GRP	GRP	-----	GLK	G	GERGEP	-----	G	55	
<i>Papio hamadryas ADIC</i>	37	GRP	-----	GRP	GRP	-----	GLK	G	GERGEP	-----	G	55	
<i>Callithrix jacchus ADIC</i>	37	GRP	-----	GRP	GRP	-----	GLK	G	EQGEP	-----	G	55	
<i>Mus musculus Adic</i>	37	GNP	-----	GRP	GRP	-----	GLK	G	GERGEP	-----	G	55	
<i>Rattus norvegicus Adic</i>	49	GIP	-----	GRP	GRP	-----	GLK	G	GERGEP	-----	G	67	
<i>Cavia porcellus ADIC</i>	36	GKP	-----	GRP	GRP	-----	GLK	G	GERGEP	-----	G	54	
<i>Oryctolagus cuniculus ADIC</i>	78	GKP	-----	GRP	GRP	-----	GLK	G	ERGAP	-----	G	96	
<i>Equus caballus ADIC</i>	70	GIP	-----	GRP	GRP	-----	GPK	G	GERGEP	-----	G	88	
<i>Canis lupus familiaris ADIC</i>	56	GTP	-----	GRP	GRP	-----	GLK	G	EQGEP	-----	G	74	
<i>Myotis lucifugus ADIC</i>	37	GKP	-----	GRP	GRP	-----	GLK	G	EQGEP	-----	G	55	
<i>Loxodonta africana ADIC</i>	52	GNP	-----	GRS	GRP	-----	GLK	G	GERGEP	-----	G	70	
<i>Homo sapiens ADID</i>	79	GHNGAP	-----	GRD	GRD	GT	PGEK	KEK	GDP	-----	G	103	
<i>Pan troglodytes ADID</i>	79	GHNGAP	-----	GRD	GRD	GT	PGEK	KEK	GDP	-----	G	103	
<i>Pongo abelii ADID</i>	48	GHNGAP	-----	GRD	GRD	GI	PGEK	KEK	GDP	-----	G	72	
<i>Nomascus leucogenys ADID</i>	78	GHNGAP	-----	GRD	GRD	GI	S	EK	KEK	GDP	-----	G	102
<i>Macaca mulatta ADID</i>	77	GHNGVP	-----	GRD	GRD	GT	A	EK	KEK	GDP	-----	G	101
<i>Otolemur garnettii ADID</i>	48	GHNGTP	-----	GRD	GRD	GT	PGEK	KEK	GDP	-----	G	72	
<i>Mus musculus Adid</i>	62	GHNGTP	-----	GRD	GRD	GT	PGEK	KEK	GDA	-----	G	86	
<i>Rattus norvegicus Adid</i>	48	GHNGIP	-----	GRD	GRD	GT	PGEK	KEK	GDA	-----	G	72	
<i>Cavia porcellus ADID</i>	90	GHNGIP	-----	GRD	GRD	GA	P	EK	KEK	GDA	-----	G	114
<i>Oryctolagus cuniculus ADID</i>	58	GHNGTP	-----	GRD	GRD	GT	PGEK	KEK	GDA	-----	G	82	
<i>Bos taurus ADID</i>	43	GHNGTP	-----	GRD	GRD	GT	PGEK	KEK	GDP	-----	G	67	
<i>Equus caballus ADID</i>	105	GHNGTP	-----	GRD	GRD	GT	PGEK	KEK	GDP	-----	G	129	
<i>Canis lupus familiaris ADID</i>	57	GHNGTP	-----	GRD	GRD	GT	PGEK	KEK	GDP	-----	G	81	
<i>Felis catus ADID</i>	48	GHNGTP	-----	GRD	GRD	GT	PGEK	KEK	GDP	-----	G	72	
<i>Myotis lucifugus ADID</i>	57	GHNGTP	-----	GRD	GRD	GT	PGEK	KEK	GDA	-----	G	81	
<i>Dasytus novemcinctus ADID</i>	47	GHNGIP	-----	GRD	GRD	GV	P	QK	KEK	GD	-----	G	71
<i>Loxodonta africana ADID</i>	48	GHNGTP	-----	GRD	GRD	GT	PGEK	KEK	GDP	-----	G	72	
<i>Homo sapiens ADIE</i>	36	GTP	GHHS	QGLP	GRD	GRD	GRD	GAP	GAP	G	EK	GEGGRP	72
<i>Pan troglodytes ADIE</i>	36	GTP	GHHS	QGLP	GRD	GRD	GRD	GAP	GAP	G	EK	GEGGRP	72
<i>Pongo abelii ADIE</i>	36	GTP	GHHS	QGLP	GRD	GRD	GRD	GAP	GAP	G	EK	GEGGRP	72
<i>Papio hamadryas ADIE</i>	36	GTP	GHHS	QGLP	GRD	GRD	GRD	GAP	GAP	G	EK	GEGGRP	72
<i>Callithrix jacchus ADIE</i>	36	GTP	GHHS	QGLP	GRD	GRD	GRD	GAP	GAP	G	EK	GEGGRP	72
<i>Otolemur garnettii ADIE</i>	36	GTP	GHHS	QGLP	GRD	GRD	GRD	GAP	GAP	G	EK	GEGQP	72
<i>Mus musculus Adie</i>	36	GTP	GHHS	QGLP	GRD	GRD	GRD	GAP	GAP	G	EK	GEGGRP	72
<i>Rattus norvegicus Adie</i>	36	GTP	GHHS	QGLP	GRD	GRD	GRD	GAP	GAP	G	EK	GEGGRP	72
<i>Homo sapiens ADIF1</i>	32	GNP	GHN	-----	GLP	GRD	GRD	GA	K	D	K	GDA	79
<i>Homo sapiens ADIF2</i>	32	GNP	GHN	-----	GLP	GRD	GRD	GA	K	D	K	GDA	79
<i>Pan troglodytes ADIF1</i>	32	GNP	GHN	-----	GLP	GRD	GRD	GA	K	D	K	GDA	79
<i>Pongo abelii ADIF1</i>	32	GNP	GHN	-----	GLP	GRD	GRD	GA	K	D	K	GDA	79
<i>Nomascus leucogenys ADIF1</i>	32	GNP	GHN	-----	GLP	GRD	GRD	GA	K	D	K	GDA	79
<i>Macaca mulatta ADIF1</i>	32	GNP	GHN	-----	GLP	GRD	GRD	GA	K	D	K	GDA	79
<i>Papio hamadryas ADIF1</i>	32	GNP	GHN	-----	GLP	GRD	GRD	GA	K	D	K	GDA	79



<i>Microcebus murinus</i> ADIF1	32	GNPGHN-----GLPGRDGRDGAKGDKGDA---GEPGHPGSPGKDGASGDKGERGAD	79
<i>Otolemur garnettii</i> ADIF1	32	GNPGHN-----GLPGRDGRDGAKGDKGDA---GEPGRPGSPGKDGMRGEKQORGAD	79
<i>Mus musculus</i> Adif1	61	GNPGHN-----GLPGRDGRDGAKGDKGDA---GEPGHPGGPKDGIIRGEKGEPEGAD	108
<i>Rattus norvegicus</i> Adif1	48	GTPGHN-----GLPGRDGRDGAKGDKGDT---GEPGHPGGPKDGIIRGEKGEPEGAD	95
<i>Cavia porcellus</i> ADIF1	32	GNPGHN-----GLPGRDGRDGAKGDKGDA---GEPGRPGSPGKDGMSGEKGERGAD	79
<i>Oryctolagus cuniculus</i> ADIF1	32	GS PGHN-----GLPGRDGRDGAKGDKGDA---GEPGHPGSPGKEGRSSEKGDORGAD	79
<i>Ochotona princeps</i> ADIF1	32	GSPGHN-----GLPGRDGRDGAKGDKGDT---GEPGHPGDGKDGSRSEKGERGAD	79
<i>Bos taurus</i> ADIF1	32	GNPGHN-----GLPGRDGRDGAKGDKGDA---GEPGHPGGPKDGMTGKKGEPEGAD	79
<i>Equus caballus</i> ADIF1	32	GNPGHN-----GLPGRDGRDGAKGDKGDA---GEPGRPGSPGKDGVNSEKGERGAD	79
<i>Canis lupus familiaris</i> ADIF1	32	GNPGHN-----GLPGRDGRDGAKGDKGEA---GEPGHPGGPKDGMNGEKGGERGAD	79
<i>Felis catus</i> ADIF1	32	GNPGHN-----GLPGRDGRDGAKGDKGEA---GEPGHPGGPKDGMNGEKGGERGAD	79
<i>Dasyopus novemcinctus</i> ADIF1	33	GNPGHN-----GLPGRDGRDGAKGDKGDA---GEPGLPGGPKDGMKGEKGERGAD	80
<i>Loxodonta africana</i> ADIF1	32	GNPGHN-----GLPGRDGRDGAKGDKGDA---GEPGLPGGPKDGMNGEKGGERGAD	79
<i>Homo sapiens</i> ADIG	98	GPPGANGSPGPHGRIGLPGRDGRDGRKGEKGEKGTAG-----	134
<i>Pan troglodytes</i> ADIG	98	GPPGANGSPGPHGRIGLPGRDGRDGRKGEKGEKGTAG-----	134
<i>Pongo abelii</i> ADIG	98	GPPGANGSPGPHGRIGLPGRDGRDGRKGEKGEKGTAG-----	134
<i>Callithrix jacchus</i> ADIG	84	GPPGANGSPGPHGRIGLPGRDGRDGRKGEKGEKGTAG-----	120
<i>Otolemur garnettii</i> ADIG	44	GPPGATGSPGPHGRIGLPGRDGRDGRKGEKGEKGAAG-----	80
<i>Mus musculus</i> Adig	86	GPPGANGSPGPHGRIGLPGRDGRDGRKGEKGEKGTAG-----	122
<i>Rattus norvegicus</i> Adig	87	GPPGANGSPGPHGRIGLPGRDGRDGRKGEKGEKGTAG-----	123
<i>Cavia porcellus</i> ADIG	44	GPPGANGSPGHHGRIGLPGRDGRDGRKGEKGEKGTAG-----	80
<i>Oryctolagus cuniculus</i> ADIG	44	GPPGANGSPGHHGRIGLPGRDGRDGRKGEKGEKGSAG-----	80
<i>Tursiops truncatus</i> ADIG	96	GPPGANGSPGPHGRIGLPGRDGRDGRKGEKGEKGAAG-----	132
<i>Bos taurus</i> ADIG	44	GPPGANGSPGPHGRIGLPGRDGRDGRKGEKGEKGAAG-----	80
<i>Equus caballus</i> ADIG	85	GPPGANGSPGPHGRIGLPGRDGRDGRKGEKGEKGAAG-----	121
<i>Canis lupus familiaris</i> ADIG	85	GPPGANGSPGPHGRIGLPGRDGRDGRKGEKGEKGAAG-----	121
<i>Myotis lucifugus</i> ADIG	44	GPPGASGSPGPHGRIGLPGRDGRDGRKGEKGEKGAAG-----	80
<i>Homo sapiens</i> ADIH	46	GPPGAPGSPGMMGRMGFPKDGQDGDGDRGDSGEEG-----	82
<i>Pan troglodytes</i> ADIH	46	GPPGAPGSPGMMGRMGFPKDGQDGDGDRGDSGEEG-----	82
<i>Pongo abelii</i> ADIH	46	GPPGAPGSPGMMGRMGFPKDGQDGDGDRGDSGEEG-----	82
<i>Nomascus leucogenys</i> ADIH	46	GPPGAPGSPGIMGRMGFPKDGQDGDGDRGDSGEEG-----	82
<i>Macaca mulatta</i> ADIH	46	GPPGAPGSPGMMGRMGFPKDGQDGDGDRGDSGEEG-----	82
<i>Papio hamadryas</i> ADIH	46	GPPGAPGSPGMMGRMGFPKDGQDGDGDRGDSGEEG-----	82
<i>Mus musculus</i> Adih	53	GPPGAPGSSGVVGRMGFPKDGQDGDGDRGDSGEEG-----	89
<i>Rattus norvegicus</i> Adih	90	GPPGAPGSSGMVGRMGFPKDGQDGDGDRGDSGEEG-----	126
<i>Dipodomys ordii</i> ADIH	46	GPPGVPGPGSTVGRMGFPKDGQDGDGDRGDSGEEG-----	82
<i>Cavia porcellus</i> ADIH	46	GPPGAPGPGSTVGRMGFPKDGQDGDGDRGDNNEEG-----	82
<i>Bos taurus</i> ADIH	63	GPPGAPGPGSMVGRMGFPGRDGDQDGDGDRGETGEEG-----	99
<i>Equus caballus</i> ADIH	46	GPPGAPGPGSMVGRMGFPKDGQDGDGDRGDNNEEG-----	82
<i>Canis lupus familiaris</i> ADIH	46	GPPGAPGPGSMVGRMGFPKDGQDGDGDRGDSGEEG-----	82
<i>Pteropus vampyrus</i> ADIH	46	GPPGTPLSGMVGRMGFPKDGQDGDGDRGDRGEEG-----	82
<i>Loxodonta africana</i> ADIH	46	GPPGAPGPGSMVGRMGFPKDGQDGDGDRGDNNEEG-----	82
<i>Homo sapiens</i> ADII	91	GPPGEPGPPGPRGPPGEGKDSGRPGLP-----GLQ-----	120
<i>Pongo abelii</i> ADII	91	GPPGEPGPPGPRGPPGEGKDSGRPGLP-----GLQ-----	120
<i>Macaca mulatta</i> ADII	91	GPPGEPGPPGPRGPPGEGKDSGRPGLP-----GLQ-----	120
<i>Mus musculus</i> Adii	91	GPPGEPGPPGPRGPPGEGKDSGRPGLP-----GLQ-----	120
<i>Rattus norvegicus</i> Adii	91	GPPGEPGPPGPRGPPGEGKDSGRPGLP-----GLQ-----	120
<i>Bos taurus</i> ADII	91	GPPGEPGPPGPRGPPGEGKDSGRPGLP-----GLQ-----	120
<i>Canis lupus familiaris</i> ADII	91	GPPGEPGPPGPRGPPGEGKDSGRPGLP-----GLQ-----	120
<i>Dasyopus novemcinctus</i> ADII	91	GPPGEPGPPGPRGPPGEGKDSGRPGLP-----GLQ-----	120
<i>Homo sapiens</i> ADIJ	76	GPPGEPGPPGPMGPPGEGKEPGRQGLPGPPGAPGLN-----	111
<i>Pan troglodytes</i> ADIJ	76	GPPGEPGPPGPMGPPGEGKEPGRQGLPGPPGAPGLN-----	111
<i>Papio hamadryas</i> ADIJ	76	GPPGEPGPPGPMGPPGEGKEPGRQGLPGPPGAPGLN-----	111
<i>Mus musculus</i> Adij	76	GPPGEPGPPGPMGPPGEGKEPGRQGLPGPPGAPGLN-----	111
<i>Rattus norvegicus</i> Adij	76	GPPGEPGPPGPMGPPGEGKEPGRQGLPGPPGAPGLN-----	111
<i>Oryctolagus cuniculus</i> ADIJ	76	GPPGEPGPPGPMGPPGEGKEPGRQGLPGPPGAPGLN-----	111
<i>Bos taurus</i> ADIJ	76	GPPGEPGPPGPMGPPGEGKEPGRQGLPGPPGAPGLN-----	111
<i>Canis lupus familiaris</i> ADIJ	76	GPPGEPGPPGPMGPPGEGKEPGRQGLPGPPGAPGLN-----	111
<i>Loxodonta africana</i> ADIJ	76	GPPGEPGPPGPMGPPGEGKEPGRQGLPGPPGAPGLN-----	111
<i>Homo sapiens</i> ADIK	70	GPP---GPPGPRGPP---GEPGRPGPPGPP---GPG-----	96
<i>Pan troglodytes</i> ADIK	70	GPP---GPPGPRGPP---GEPGRPGPPGPP---GPG-----	96
<i>Gorilla gorilla</i> ADIK	70	GPP---GPPGPRGPP---GEPGRPGPPGPP---GPG-----	96
<i>Papio hamadryas</i> ADIK	70	GPP---GPPGPRGPP---GEPGRPGPPGPP---GPG-----	96
<i>Callithrix jacchus</i> ADIK	70	GPP---GPPGPRGPP---GEPGRPGPPGPP---GPG-----	96
<i>Rattus norvegicus</i> Adik	70	GPP---GPPGPRGPP---GEPGRPGPPGPP---GPG-----	96
<i>Cavia porcellus</i> ADIK	70	GPP---GPPGPRGPP---GEPGRPGPPGPP---GPG-----	96
<i>Equus caballus</i> ADIK	70	GPP---GPPGPRGPP---GEPGRPGPPGPP---GPG-----	96
<i>Canis lupus familiaris</i> ADIK	70	GPP---GPPGPRGPP---GEPGRPGPPGPP---GPG-----	96
<i>Dasyopus novemcinctus</i> ADIK	70	GPP---GPPGPRGPP---GEPGRPGPPGPP---GPG-----	96
<i>Loxodonta africana</i> ADIK	70	GPP---GPPGPRGPP---GEPGRPGPPGPP---GPG-----	96
<i>Mus musculus</i> Adil	82	GPPGDRGPPGVPVGGPEKEPGRKPGPPGLPGSGGSG-----	117
<i>Rattus norvegicus</i> Adil	82	GPPGDRGPPGVPVGGPEKEPGRKPGPPGLPGSGGSG-----	117
<i>Homo sapiens</i> ADIM	159	-----SFRGYQGPPGPPGPPGIP-----G-----	177
<i>Pan troglodytes</i> ADIM	159	-----SFRGYQGPPGPPGPPGIP-----G-----	177

<i>Pongo abelii</i> ADIM	115	-----SFRGYQGGPPGPPGPPGIP-----G-----	133
<i>Nomascus leucogenys</i> ADIM	159	-----SFRGYQGGPPGPPGPPGIP-----G-----	177
<i>Papio hamadryas</i> ADIM	159	-----SFRGYQGGPPGPPGPPGIP-----G-----	177
<i>Callithrix jacchus</i> ADIM	149	-----SFRGYQGGPPGPPGPPGIP-----G-----	167
<i>Mus musculus</i> Adim	48	-----GFRGYQGGPPGPPGPPGIP-----G-----	66
<i>Rattus norvegicus</i> Adim	122	-----GFRGYQGGPPGPPGPPGIP-----G-----	140
<i>Cavia porcellus</i> ADIM	115	-----GFRGYQGGPPGPPGPPGIP-----G-----	133
<i>Bos taurus</i> ADIM	48	-----SFRGYQGGPPGPPGPPGIP-----G-----	66
<i>Equus caballus</i> ADIM	48	-----SFRGYQGGPPGPPGPPGIP-----G-----	66
<i>Canis lupus familiaris</i> ADIM	109	-----SFRGYQGGPPGPPGPPGIP-----G-----	127
<i>Homo sapiens</i> ADIN	-	-----	-
<i>Pan troglodytes</i> ADIN	-	-----	-
<i>Pongo abelii</i> ADIN	-	-----	-
<i>Nomascus leucogenys</i> ADIN	-	-----	-
<i>Macaca mulatta</i> ADIN	-	-----	-
<i>Callithrix jacchus</i> ADIN	-	-----	-
<i>Mus musculus</i> Adin	-	-----	-
<i>Cavia porcellus</i> ADIN	-	-----	-
<i>Tursiops truncatus</i> ADIN	-	-----	-
<i>Canis lupus familiaris</i> ADIN	-	-----	-
<i>Dasyopus novemcinctus</i> ADIN	-	-----	-
<i>Loxodonta africana</i> ADIN	-	-----	-
<i>Homo sapiens</i> ADIO	70	-----G-----	70
<i>Pan troglodytes</i> ADIO	70	-----G-----	70
<i>Macaca mulatta</i> ADIO	65	-----G-----	65
<i>Bos taurus</i> ADIO	69	-----G-----	69
<i>Myotis lucifugus</i> ADIO	69	-----G-----	69
<i>Homo sapiens</i> ADIP	197	-----G-----	197
<i>Otolemur garnettii</i> ADIP	99	-----G-----	99
<i>Mus musculus</i> Adip	99	-----G-----	99
<i>Cavia porcellus</i> ADIP	99	-----G-----	99
<i>Bos taurus</i> ADIP	122	-----G-----	122
<i>Equus caballus</i> ADIP	97	-----G-----	97
<i>Loxodonta africana</i> ADIP	151	-----G-----	151
<i>Homo sapiens</i> ADIQ	97	-----G-----	97
<i>Pan troglodytes</i> ADIQ	97	-----G-----	97
<i>Pongo abelii</i> ADIQ	97	-----G-----	97
<i>Nomascus leucogenys</i> ADIQ	97	-----G-----	97
<i>Macaca mulatta</i> ADIQ	97	-----G-----	97
<i>Mus musculus</i> Adiq	83	-----G-----	83
<i>Rattus norvegicus</i> Adiq	82	-----G-----	82
<i>Homo sapiens</i> ADIR	-	-----	-
<i>Pan troglodytes</i> ADIR	-	-----	-
<i>Pongo abelii</i> ADIR	-	-----	-
<i>Nomascus leucogenys</i> ADIR	-	-----	-
<i>Macaca mulatta</i> ADIR	-	-----	-
<i>Papio hamadryas</i> ADIR	-	-----	-
<i>Callithrix jacchus</i> ADIR	-	-----	-
<i>Tarsius syrichta</i> ADIR	-	-----	-
<i>Otolemur garnettii</i> ADIR	-	-----	-
<i>Tupaia belangeri</i> ADIR	-	-----	-
<i>Mus musculus</i> Adir	-	-----	-
<i>Rattus norvegicus</i> Adir	-	-----	-
<i>Cavia porcellus</i> ADIR	-	-----	-
<i>Oryctolagus cuniculus</i> ADIR	-	-----	-
<i>Tursiops truncatus</i> ADIR	-	-----	-
<i>Bos taurus</i> ADIR	-	-----	-
<i>Equus caballus</i> ADIR	-	-----	-
<i>Canis lupus familiaris</i> ADIR	-	-----	-
<i>Myotis lucifugus</i> ADIR	-	-----	-
<i>Pteropus vampyrus</i> ADIR	-	-----	-
<i>Erinaceus europaeus</i> ADIR	-	-----	-
<i>Dasyopus novemcinctus</i> ADIR	-	-----	-
<i>Choloepus hoffmanni</i> ADIR	-	-----	-
<i>Loxodonta africana</i> ADIR	-	-----	-

	370	380	390	400	410	420
<i>Homo sapiens</i> ADIA						
<i>Homo sapiens</i> ADIA						
<i>Papio hamadryas</i> ADIA						
<i>Mus musculus</i> Adia						
<i>Rattus norvegicus</i> Adia						
<i>Cavia porcellus</i> ADIA						
<i>Ochotona princeps</i> ADIA						
<i>Bos taurus</i> ADIA						
<i>Equus caballus</i> ADIA						
<i>Canis lupus familiaris</i> ADIA						
<i>Felis catus</i> ADIA						
<i>Myotis lucifugus</i> ADIA						
<i>Dasyopus novemcinctus</i> ADIA						
<i>Loxodonta africana</i> ADIA						
<i>Homo sapiens</i> ADIB						
<i>Pan troglodytes</i> ADIB						
<i>Pongo abelii</i> ADIB						
<i>Nomascus leucogenys</i> ADIB						
<i>Callithrix jacchus</i> ADIB						
<i>Otolemur garnettii</i> ADIB						
<i>Mus musculus</i> Adib						
<i>Rattus norvegicus</i> Adib						
<i>Cavia porcellus</i> ADIB						
<i>Oryctolagus cuniculus</i> ADIB						
<i>Bos taurus</i> ADIB						
<i>Equus caballus</i> ADIB						
<i>Canis lupus familiaris</i> ADIB						
<i>Myotis lucifugus</i> ADIB						
<i>Loxodonta africana</i> ADIB						
<i>Homo sapiens</i> ADIC						
<i>Macaca mulatta</i> ADIC						
<i>Papio hamadryas</i> ADIC						
<i>Callithrix jacchus</i> ADIC						
<i>Mus musculus</i> Adic						
<i>Rattus norvegicus</i> Adic						
<i>Cavia porcellus</i> ADIC						
<i>Oryctolagus cuniculus</i> ADIC						
<i>Equus caballus</i> ADIC						
<i>Canis lupus familiaris</i> ADIC						
<i>Myotis lucifugus</i> ADIC						
<i>Loxodonta africana</i> ADIC						
<i>Homo sapiens</i> ADID						
<i>Pan troglodytes</i> ADID						
<i>Pongo abelii</i> ADID						
<i>Nomascus leucogenys</i> ADID						
<i>Macaca mulatta</i> ADID						
<i>Otolemur garnettii</i> ADID						
<i>Mus musculus</i> Adid						
<i>Rattus norvegicus</i> Adid						
<i>Cavia porcellus</i> ADID						
<i>Oryctolagus cuniculus</i> ADID						
<i>Bos taurus</i> ADID						
<i>Equus caballus</i> ADID						
<i>Canis lupus familiaris</i> ADID						
<i>Felis catus</i> ADID						
<i>Myotis lucifugus</i> ADID						
<i>Dasyopus novemcinctus</i> ADID						
<i>Loxodonta africana</i> ADID						
<i>Homo sapiens</i> ADIE						
<i>Pan troglodytes</i> ADIE						
<i>Pongo abelii</i> ADIE						
<i>Papio hamadryas</i> ADIE						
<i>Callithrix jacchus</i> ADIE						
<i>Otolemur garnettii</i> ADIE						
<i>Mus musculus</i> Adie						
<i>Rattus norvegicus</i> Adie						
<i>Homo sapiens</i> ADIF1	80	GKVEAKGIKGDQGS	SRGSPGKHGPKGLAGPMGEKGLRGETG	PQQQKGNKGDVGP	TGPEGPR	139
<i>Homo sapiens</i> ADIF2	80	GKVEAKGIKGDQGS	SRGSPGKHGPKGLAGPMGEKGLRGETG	PQQQKGNKGDVGP	TGPEGPR	139
<i>Pan troglodytes</i> ADIF1	80	GKVEAKGIKGDQGS	SRGSPGKHGPKGLAGPMGEKGLRGETG	PQQQKGNKGDVGP	TGPEGPR	139
<i>Pongo abelii</i> ADIF1	80	GKVEAKGIKGDQGS	SRGSPGKHGPKGLAGPMGEKGLRGETG	PQQQKGNKGDVGP	TGPEGPR	139
<i>Nomascus leucogenys</i> ADIF1	80	GKVEAKGIKGDQGS	SRGSPGKHGPKGLAGPMGEKGLRGETG	PQQQKGNKGDVGP	TGPEGPS	139
<i>Macaca mulatta</i> ADIF1	80	GKVEAKGIKGDQGS	SRGSPGKHGPKGLAGPMGEKGLRGETG	PQQQKGNKGDVGP	TGPEGPR	139
<i>Papio hamadryas</i> ADIF1	80	GKVEAKGIKGDQGS	SRGSPGKHGPKGLAGPMGEKGLRGETG	PQQQKGNKGDVGP	TGPEGPR	139

<i>Microcebus murinus</i> ADIF1	80	GNVEAKGIKGDQGSRGPPGKHGPKGLLGPMEKGLQGETGPPQKQKGEKGDVGPPEGREGQR	139
<i>Otolemur garnettii</i> ADIF1	80	GNVEAKGIKGDQGSKGP GPKHGP KGLVGPMEKGIQGEPPGPEKGDVGLPGEGLR	139
<i>Mus musculus</i> Adif1	109	GRVEAKGIKGDPSRSGSPGKHGPKGSIGPTGEQGLPGETGPQQQKGDKEVGP TGPEGLM	168
<i>Rattus norvegicus</i> Adif1	96	GRVEAKGIKGDPSRSGSPGKHGPKGSIGPTGEQGLPGETGPQQQKGDKEVGP TGPEGLM	155
<i>Cavia porcellus</i> ADIF1	80	GKVEAKGIKGDPSRSGPPGKHGPKGSVGP TGERGLQGE MGPQQKGDKGDVGS PGPRLT	139
<i>Oryctolagus cuniculus</i> ADIF1	80	GKVEAKGIKGDQGSRGPPGKHGPKGSVGP MGE PGLQGETGLQGGKGDKGDVGP RPGEGLT	139
<i>Ochotona princeps</i> ADIF1	80	GKVEAKGMKGDPSRSGSPGKHGPKGSVGP VGE PGLQGETGPQQQKGEKGDVGPMPGEGQT	139
<i>Bos taurus</i> ADIF1	80	GHVEAKGIKGDQGSRGPPGKHGPKGLVGP PPEKGLTGETGPQQQKGEKGDVGPVGP EPE	139
<i>Equus caballus</i> ADIF1	80	GKVEAKGVKGDQGSRGSPGKHGPKGFVGP MGEKGLRGETGPQQQKGDKGDVGP TGPEGLK	139
<i>Canis lupus familiaris</i> ADIF1	80	GKVEAKGIKGDQGSRGPPGKHGPKGLVGP MGEKGLRGETGPQQQKGDKGGVGP SGPEGLK	139
<i>Felis catus</i> ADIF1	80	GKVEAKGIKGDQGSQGP GKHGPKGFVGP MGEKGLQGETGPRGP KGEKGDVGP TGPPGLQ	139
<i>Dasyopus novemcinctus</i> ADIF1	81	GRVEAKGIKGEQGSIGPPGKHGPKGFVGP MGEKGLRGETGPQQQKGGKGEVGP TGPPGLQ	140
<i>Loxodonta africana</i> ADIF1	80	GKVEAKGIKGEPPSRSGSPGKHGPKGFVGP MGEKGLKGETGPQQQKGSKGEVGP IGP EGLQ	139
<i>Homo sapiens</i> ADIG	135	-----LR	136
<i>Pan troglodytes</i> ADIG	135	-----LR	136
<i>Pongo abelii</i> ADIG	135	-----LR	136
<i>Callithrix jacchus</i> ADIG	121	-----LR	122
<i>Otolemur garnettii</i> ADIG	81	-----LR	82
<i>Mus musculus</i> Adig	123	-----LK	124
<i>Rattus norvegicus</i> Adig	124	-----LK	125
<i>Cavia porcellus</i> ADIG	81	-----LR	82
<i>Oryctolagus cuniculus</i> ADIG	81	-----LR	82
<i>Tursiops truncatus</i> ADIG	133	-----LR	134
<i>Bos taurus</i> ADIG	81	-----LR	82
<i>Equus caballus</i> ADIG	122	-----LR	123
<i>Canis lupus familiaris</i> ADIG	122	-----LR	123
<i>Myotis lucifugus</i> ADIG	81	-----LR	82
<i>Homo sapiens</i> ADIH	83	-----PP	84
<i>Pan troglodytes</i> ADIH	83	-----PP	84
<i>Pongo abelii</i> ADIH	83	-----PP	84
<i>Nomascus leucogenys</i> ADIH	83	-----PP	84
<i>Macaca mulatta</i> ADIH	83	-----PP	84
<i>Papio hamadryas</i> ADIH	83	-----PP	84
<i>Mus musculus</i> Adih	90	-----PP	91
<i>Rattus norvegicus</i> Adih	127	-----PP	128
<i>Dipodomys ordii</i> ADIH	83	-----PP	84
<i>Cavia porcellus</i> ADIH	83	-----PP	84
<i>Bos taurus</i> ADIH	100	-----SP	101
<i>Equus caballus</i> ADIH	83	-----PP	84
<i>Canis lupus familiaris</i> ADIH	83	-----PP	84
<i>Pteropus vampyrus</i> ADIH	83	-----PP	84
<i>Loxodonta africana</i> ADIH	83	-----AP	84
<i>Homo sapiens</i> ADII	-	-----	-
<i>Pongo abelii</i> ADII	-	-----	-
<i>Macaca mulatta</i> ADII	-	-----	-
<i>Mus musculus</i> Adii	-	-----	-
<i>Rattus norvegicus</i> Adii	-	-----	-
<i>Bos taurus</i> ADII	-	-----	-
<i>Canis lupus familiaris</i> ADII	-	-----	-
<i>Dasyopus novemcinctus</i> ADII	-	-----	-
<i>Homo sapiens</i> ADIJ	-	-----	-
<i>Pan troglodytes</i> ADIJ	-	-----	-
<i>Papio hamadryas</i> ADIJ	-	-----	-
<i>Mus musculus</i> Adij	-	-----	-
<i>Rattus norvegicus</i> Adij	-	-----	-
<i>Oryctolagus cuniculus</i> ADIJ	-	-----	-
<i>Bos taurus</i> ADIJ	-	-----	-
<i>Canis lupus familiaris</i> ADIJ	-	-----	-
<i>Loxodonta africana</i> ADIJ	-	-----	-
<i>Homo sapiens</i> ADIK	-	-----	-
<i>Pan troglodytes</i> ADIK	-	-----	-
<i>Gorilla gorilla</i> ADIK	-	-----	-
<i>Papio hamadryas</i> ADIK	-	-----	-
<i>Callithrix jacchus</i> ADIK	-	-----	-
<i>Rattus norvegicus</i> Adik	-	-----	-
<i>Cavia porcellus</i> ADIK	-	-----	-
<i>Equus caballus</i> ADIK	-	-----	-
<i>Canis lupus familiaris</i> ADIK	-	-----	-
<i>Dasyopus novemcinctus</i> ADIK	-	-----	-
<i>Loxodonta africana</i> ADIK	-	-----	-
<i>Mus musculus</i> Adil	-	-----	-
<i>Rattus norvegicus</i> Adil	-	-----	-
<i>Homo sapiens</i> ADIM	-	-----	-
<i>Pan troglodytes</i> ADIM	-	-----	-

<i>Pongo abelii</i> ADIM	-	-----	-
<i>Nomascus leucogenys</i> ADIM	-	-----	-
<i>Papio hamadryas</i> ADIM	-	-----	-
<i>Callithrix jacchus</i> ADIM	-	-----	-
<i>Mus musculus</i> Adim	-	-----	-
<i>Rattus norvegicus</i> Adim	-	-----	-
<i>Cavia porcellus</i> ADIM	-	-----	-
<i>Bos taurus</i> ADIM	-	-----	-
<i>Equus caballus</i> ADIM	-	-----	-
<i>Canis lupus familiaris</i> ADIM	-	-----	-
<i>Homo sapiens</i> ADIN	-	-----	-
<i>Pan troglodytes</i> ADIN	-	-----	-
<i>Pongo abelii</i> ADIN	-	-----	-
<i>Nomascus leucogenys</i> ADIN	-	-----	-
<i>Macaca mulatta</i> ADIN	-	-----	-
<i>Callithrix jacchus</i> ADIN	-	-----	-
<i>Mus musculus</i> Adin	-	-----	-
<i>Cavia porcellus</i> ADIN	-	-----	-
<i>Tursiops truncatus</i> ADIN	-	-----	-
<i>Canis lupus familiaris</i> ADIN	-	-----	-
<i>Dasypus novemcinctus</i> ADIN	-	-----	-
<i>Loxodonta africana</i> ADIN	-	-----	-
<i>Homo sapiens</i> ADIO	-	-----	-
<i>Pan troglodytes</i> ADIO	-	-----	-
<i>Macaca mulatta</i> ADIO	-	-----	-
<i>Bos taurus</i> ADIO	-	-----	-
<i>Myotis lucifugus</i> ADIO	-	-----	-
<i>Homo sapiens</i> ADIP	-	-----	-
<i>Otolemur garnettii</i> ADIP	-	-----	-
<i>Mus musculus</i> Adip	-	-----	-
<i>Cavia porcellus</i> ADIP	-	-----	-
<i>Bos taurus</i> ADIP	-	-----	-
<i>Equus caballus</i> ADIP	-	-----	-
<i>Loxodonta africana</i> ADIP	-	-----	-
<i>Homo sapiens</i> ADIQ	-	-----	-
<i>Pan troglodytes</i> ADIQ	-	-----	-
<i>Pongo abelii</i> ADIQ	-	-----	-
<i>Nomascus leucogenys</i> ADIQ	-	-----	-
<i>Macaca mulatta</i> ADIQ	-	-----	-
<i>Mus musculus</i> Adiq	-	-----	-
<i>Rattus norvegicus</i> Adiq	-	-----	-
<i>Homo sapiens</i> ADIR	-	-----	-
<i>Pan troglodytes</i> ADIR	-	-----	-
<i>Pongo abelii</i> ADIR	-	-----	-
<i>Nomascus leucogenys</i> ADIR	-	-----	-
<i>Macaca mulatta</i> ADIR	-	-----	-
<i>Papio hamadryas</i> ADIR	-	-----	-
<i>Callithrix jacchus</i> ADIR	-	-----	-
<i>Tarsius syrichta</i> ADIR	-	-----	-
<i>Otolemur garnettii</i> ADIR	-	-----	-
<i>Tupaia belangeri</i> ADIR	-	-----	-
<i>Mus musculus</i> Adir	-	-----	-
<i>Rattus norvegicus</i> Adir	-	-----	-
<i>Cavia porcellus</i> ADIR	-	-----	-
<i>Oryctolagus cuniculus</i> ADIR	-	-----	-
<i>Tursiops truncatus</i> ADIR	-	-----	-
<i>Bos taurus</i> ADIR	-	-----	-
<i>Equus caballus</i> ADIR	-	-----	-
<i>Canis lupus familiaris</i> ADIR	-	-----	-
<i>Myotis lucifugus</i> ADIR	-	-----	-
<i>Pteropus vampyrus</i> ADIR	-	-----	-
<i>Erinaceus europaeus</i> ADIR	-	-----	-
<i>Dasypus novemcinctus</i> ADIR	-	-----	-
<i>Choloepus hoffmanni</i> ADIR	-	-----	-
<i>Loxodonta africana</i> ADIR	-	-----	-

*Homo sapiens* ADIA 64 -LPGL---AGDHGEF**EEKD**PI**GNPKV**PK**PM**PK**GP**AP**AP**PK**ES**GDY--- 116  
430 440 450 460 470 480

*Homo sapiens* ADIA 64 -LPGL---AGDHGEFGEKGDPIGNPKVGPKGPMGPKGGPAGAPGPKGESGDY--- 116  
*Papio hamadryas* ADIA 64 -LPGL---AGDHGEFGEKGDPIGNPKVGPKGPMGPKGGPAGAPGPKGESGDY--- 116  
*Mus musculus* Adia 91 -LPGL---AGDLGEFGEKGDPIGTPGKVGPKGPVGPKGTPGPSRPRGPKGDSGDY--- 143  
*Rattus norvegicus* Adia 62 -LPGL---AGDHGELGEKGDAGIPGIPGKVGPKGPVGPKGAPGPPGPRGPKGDSGDY--- 114  
*Cavia porcellus* ADIA 62 -SPGL---AGDHGEFGEKGDPIGNPKVGPKGPIGPKGAPGIPGGGPKGESGDY--- 114  
*Ochotona princeps* ADIA 62 -LPGL---AGDHGEFGEKGDPSFNPNGKVGPKGPVGPKGAPGLPGLRGPKGESGDY--- 114  
*Bos taurus* ADIA 58 -LPGL---VSHLNENGEKDDPGFPMGPKVGPKGPIGPKGVPPGVRGPKGESGDY--- 110  
*Equus caballus* ADIA 63 -LPGL---AAHRGNFGEKGEPIGNPKVGPKGPAKPKGAPGPPGARGPKGESGDY--- 115  
*Canis lupus familiaris* ADIA 61 -LPGL---AGDHGEFGEKGDPIGTPGKVGPKGPVGPKSPGPPGARGAKGESGDY--- 113  
*Felis catus* ADIA 65 -LPGL---AGDHGEFGEKGDPIGNPKVGPKGVPKSPGPPGARGPKGESGDY--- 117  
*Myotis lucifugus* ADIA 62 -LPGL---AGDHGEFGEKDDPGTPGKPKVGPKGVPVGPKGAPGLPGLRGPKGESGDY--- 114  
*Dasypus novemcinctus* ADIA 59 -LPGL---AGDHGEYGEKDDPGIPGNPKVGPKGVPVGPKSPGPPGARGPKGESGDY--- 111  
*Loxodonta africana* ADIA 62 -LPGL---AGDHGEFGEKDDPGTPGNPKVGPKGPIGPKGSPGSPGARGPKGESGDY--- 114  
*Homo sapiens* ADIB 62 -IPAI---PGIRGPKGQKGEPLPGHPGKNGPMGPPGMPGVPGPMGIPGEPGEEGRY--- 114  
*Pan troglodytes* ADIB 62 -IPAI---PGIRGPKGQKGEPLPGHPGKNGPMGPPGMPGVPGPMGIPGEPGEEGRY--- 114  
*Pongo abelii* ADIB 62 -IPAI---PGIRGPKGQKGEPLPGHPGKNGPMGPPGMPGVPGPMGIPGEPGEEGRY--- 114  
*Nomascus leucogenys* ADIB 63 -IPAI---PGIRGPKGQKGEPLPGHPGKNGPMGPPGMPGVPGPMGIPGEPGEEGRY--- 115  
*Callithrix jacchus* ADIB 61 -IPAI---PGTRGPKGQKGEPTGHPGKNGPMGPPGIPGVPGPIGIPGEPGEEGRY--- 113  
*Otolemur garnettii* ADIB 60 -MPAI---PGTRGPKGKGEPIGHPGKNGPMGPPGLPGVPGFMPGPEEGEGRY--- 112  
*Mus musculus* Adib 93 -IPAV---PGTRGPKGQKGEPMGPHRGKNGPRGTSGLPDGPRGPPGEPGVEGRY--- 145  
*Rattus norvegicus* Adib 85 -IPAI---PGTQGPKGQKGEPMGPHRGKNGPMGTSGPSGDPGPRGPPGEPGEEGRY--- 137  
*Cavia porcellus* ADIB 109 -IPAI---PGTRGPKGKGEPTGHPGKNGPMGAPMPGNPGRGPPGMPGEEGRY--- 161  
*Oryctolagus cuniculus* ADIB 115 -IPAI---PGTRGPKGQKGEPTGHPGKNGPMGSSGPPGDPGHRGPPGEPGVEGRY--- 167  
*Bos taurus* ADIB 60 -IPAA---PGTRGPKGQKDDPGTPGYGKNGPMGTPGIPGAPGTMGPPGEPGVEGRY--- 112  
*Equus caballus* ADIB 80 -IPAV---PGTQGPKGQKGEPTGHPGKNGPMGTSGLMAGLPLGLVGRGEPGEEGRY--- 132  
*Canis lupus familiaris* ADIB 62 -IPAI---PGTRGPKGQKGEPTGHPGKNGPMGTPGIPGVPGKNGPMGTPGIPGVPGPPGEPGEEGRY--- 114  
*Myotis lucifugus* ADIB 62 -IPAI---PGTRGPKGQKGEAGTPGFPKNGPMGAAGLPGTPGIMGNPGEEGEGRY--- 114  
*Loxodonta africana* ADIB 60 -IPAT---PRTRGPKGQKGEPTGHPGKNGPMGTSIPGDPGIQPPGEPGEEGRY--- 112  
*Homo sapiens* ADIC 56 -APGIR--TGIQGLKGDQGEPPGSGNPKVGYGPGSGLGARGIPGIKGKGNPNI--- 109  
*Macaca mulatta* ADIC 56 -APGIR--TGIQGLKGDQGEPPGSGNPKVGYGPGSGLGDRGIPGIKGKGNPNI--- 109  
*Papio hamadryas* ADIC 56 -APGIR--TGIQGLKGDQGEPPGSGNPKVGYGPGSGLGDRGIPGIKGKGNPNI--- 109  
*Callithrix jacchus* ADIC 56 -APGIR--TGIQGLKGDQGEPPGSGKMGYGPGSGLPGIHMPIGKIKGNPNI--- 109  
*Mus musculus* Adic 56 -AAGIR--TGIRGFKGDPGESGPPGKPGNVGLPGPSGLGDSGPPGLKGVKGNPNI--- 109  
*Rattus norvegicus* Adic 68 -AAGIR--TGIRGLKGDQGESGPPGKPGNVGFPPTGPLNSGPPGLKGVKGNPNI--- 121  
*Cavia porcellus* ADIC 55 -APGIR--TGIRGLKGDQGEPPGPKGNVGYGPGSPPGPEQGASGPRGMKGNPNI--- 108  
*Oryctolagus cuniculus* ADIC 97 -APGMR--TGIRGLKGDQEPGPPGSGNPKVGYGPGSGLGDRGIPGIKGKGNPNI--- 150  
*Equus caballus* ADIC 89 -APGIQ--TGIRGLKGDQGEPPGSGNMGYGPGSPPGVPAPGLKGIKGNPNI--- 142  
*Canis lupus familiaris* ADIC 75 -APGMR--TGIRGLKGDQDPPGPNPKNMGFPGSGMLLPGIPRRGPKGNPNI--- 128  
*Myotis lucifugus* ADIC 56 -APGIR--TGIRGLKGDQGEPPGPIGNMGYGPGSGLGNPAGLGIKGNPNI--- 109  
*Loxodonta africana* ADIC 71 -AAGIR--TGIQGLKGDQDPPGPKSGKMGFPGSPGTPGISPPGLKGLGNPNI--- 124  
*Homo sapiens* ADID 104 -----LIGPKGDIETGVPGAEGPRGFPGIQRKKEP---GEG--- 138  
*Pan troglodytes* ADID 104 -----LIGPKGDIETGVPGAEGPRGFPGIQRKKEP---GEG--- 138  
*Pongo abelii* ADID 73 -----LIGPKGDIETGVPGAEGPRGFPGIQRKKEP---GEG--- 107  
*Nomascus leucogenys* ADID 103 -----LIGPKGDIETGVPGAEGPRGFPGIQRKKEP---GEG--- 137  
*Macaca mulatta* ADID 102 -----LIGPKGDTGETGVTGAEGPRGFPGIQRKKEP---GEG--- 136  
*Otolemur garnettii* ADID 73 -----LVGPKGDTGETGVTGAEGPRGFPGTPGRKKEP---GEG--- 107  
*Mus musculus* Adid 87 -----LLGPKGETGDVGMTGAEGPRGFPGTPGRKKEP---GEA--- 121  
*Rattus norvegicus* Adid 73 -----VLGPKGDPGDAGMTGAEGPRGFPGTPGRKKEP---GEA--- 107  
*Cavia porcellus* ADID 115 -----FVGPKGDTGETGVTGAEGPRGFPGVPGRKGER---GQD--- 149  
*Oryctolagus cuniculus* ADID 83 -----LVGPKGDTGETGVTGAEGPRGFPGSPGRKKEP---GEG--- 117  
*Bos taurus* ADID 68 -----LVGPKGDTGETGITGIEGPRGFPGTPGRKKEP---GES--- 102  
*Equus caballus* ADID 130 -----LVGPKGDAGETGVPVEGPRGFPGIPGRKKEP---GES--- 164  
*Canis lupus familiaris* ADID 82 -----LVGPKGDTGETGVTGVEGPRGFPGTPGRKKEP---GES--- 116  
*Felis catus* ADID 73 -----LVGPKGDTGETGVTGIEGPRGFPGIPGRKKEP---GES--- 107  
*Myotis lucifugus* ADID 82 -----LVGPKGDTGETGVTGVEGPRGFPGVQGRKKEP---GES--- 116  
*Dasypus novemcinctus* ADID 72 -----LLGPKGDSGEIGVSGVEGPRGFPGIPGRKKEP---GES--- 106  
*Loxodonta africana* ADID 73 -----LIGPKGDTGETGVTGVEGPRGFPGTPGRKKEP---GEA--- 107  
*Homo sapiens* ADIE 73 -----LPGPRGDPGRGEAGPAGPTGPAGEC--- 98  
*Pan troglodytes* ADIE 73 -----LPGPRGDPGRGEAGPAGPTGPAGEC--- 98  
*Pongo abelii* ADIE 73 -----LPGPRGEPGRGEAGPAGPTGPAGEC--- 98  
*Papio hamadryas* ADIE 73 -----LPGPRGEPGRGEAGPAGPTGPAGEC--- 98  
*Callithrix jacchus* ADIE 73 -----LPGPRGEPGRGEAGPAGPTGPAGEC--- 98  
*Otolemur garnettii* ADIE 73 -----LPGPRGEPGRGEAGPAGATGPAGEC--- 98  
*Mus musculus* Adie 73 -----LPGPRGEPGRGEAGPMGAI GPAGEC--- 98  
*Rattus norvegicus* Adie 73 -----LPGPRGEPGRGEAGPVGAI GPAGEC--- 98  
*Homo sapiens* ADIF1 140 GNIGPLGPTGLPGMGPPIGKPGPKGEAGPTGPQGEPPVIRGWKDRGEKGI GET--- 196  
*Homo sapiens* ADIF2 140 GNIGPLGPTGLPGMGPPIGKPGPKGEAGPTGPQGEPPVIRGWKDRGEKGI GET--- 196  
*Pan troglodytes* ADIF1 140 GNIGPLGPTGLPGMGPPIGKPGPKGEAGPTGPQGEPPVIRGWKDRGEKGI GET--- 196  
*Pongo abelii* ADIF1 140 GNIGPLGPTGLPGMGPPIGKPGPKGEAGPTGPQGEPPVIRGWKDRGEKGI GET--- 196  
*Nomascus leucogenys* ADIF1 140 GNIGPLGPTGLPGMGPPIGTPPKGEAGPTGPQGEPPVIRGWKDRGEKGI GET--- 196  
*Macaca mulatta* ADIF1 140 GDIGPLGPTGLPGMGPPIGKPGPKGEAGPTGPQGEPPVIRGWKDRGEKGI GET--- 196  
*Papio hamadryas* ADIF1 140 GDIGPLGPTGLPGSMGPPIGKPGPKGEAGPTGPQGEPPVIRGWKDRGEKGI GET--- 196

<i>Microcebus murinus</i> ADIF1	140	GHTGPLGPTGLPGVPGVPIGKPGPKGEAGPVGPQGEPEGVRGIRGWKDRGEKGI	196
<i>Otolemur garnettii</i> ADIF1	140	GNTGPGSPTGVPVGPVPGKPKGLKGEAGPVGPQGEPEGVRGLRGWKDRGEKGI	196
<i>Mus musculus</i> Adif1	169	GSTGPLGPKLPGPMGPIGKPGPRGEAGPMGPQGEPEGVRGMRGWKDRGEKGV	225
<i>Rattus norvegicus</i> Adif1	156	GSTGPLGPKLPGVPGVPIGKPGPRGEAGPMGPQGEPEGVRGMRGWKDRGEKGV	212
<i>Cavia porcellus</i> ADIF1	140	GSTGPLGPTGLTGPMPGPIGKPGPKGEAGPIGPQGEPEGVRGIRGWKDRGEKGI	196
<i>Oryctolagus cuniculus</i> ADIF1	140	GDPGPLGPNLPGVPGVPIGKPGPKGEAGPVGPQGEPEGVRGIRGWKDRGEKGI	196
<i>Ochotona princeps</i> ADIF1	140	GDPGPAAGMGLRGPVPGI	196
<i>Bos taurus</i> ADIF1	140	GSTGPGSPTGLLGPVPGI	196
<i>Equus caballus</i> ADIF1	140	GNTGLSGPPGLPGPIGPIGKPGPKGDAGPLGPQGEPEGVRGMRGWKDRGEKGI	196
<i>Canis lupus familiaris</i> ADIF1	140	GSTGPGSPTGLPGMPGPIGKPGPKGDAGPLGPQGEPEGVRGMRGWKDRGEKGI	196
<i>Felis catus</i> ADIF1	140	GHTGPGSPTGLPGMPVPGKPGPKGDAGPLGPQGEPEGVRGMRGWKDRGEKGI	196
<i>Dasyurus novemcinctus</i> ADIF1	141	GNAGPSGPMGPPGVPVPIGKPGPKGEAGPLGPQGEPEGVRGMRGWKDRGEKGI	197
<i>Loxodonta africana</i> ADIF1	140	GNPGPLGTTGLRGPVPGI	196
<i>Homo sapiens</i> ADIG	137	GKTGPLGLAGEKGDQGETGKKGPIGPEGEKGEVGPVPPGPKGDRGEQDGLPGVC	193
<i>Pan troglodytes</i> ADIG	137	GKTGPLGLAGEKGDQGETGKKGPIGPEGEKGEVGPVPPGPKGDRGEQDGLPGVC	193
<i>Pongo abelii</i> ADIG	137	GKTGPLGLAGEKGDQGETGKKGPMGPEGEKGEVGPVPPGPKGDRGEQDGLPGVC	193
<i>Callithrix jacchus</i> ADIG	123	GKTGPLGLAGEKGDQGETGKKGPMGPEGEKGEVGPVPPGPKGDRGEQDGLPGVC	179
<i>Otolemur garnettii</i> ADIG	83	GKTGPGVGLAGEKGDQGETGKKGPMGPEGEKGEVGPVPPGPKGDRGEQDGLPGVC	139
<i>Mus musculus</i> Adig	125	GKTGPLGLAGEKGDQGETGKKGPIGPEGEKGEVGPVPPGPKGDRGEQDGLPGVC	181
<i>Rattus norvegicus</i> Adig	126	GKTGPLGLAGEKGDQGETGKKGPIGPEGEKGEVGPVPPGPKGDRGEQDGLPGVC	182
<i>Cavia porcellus</i> ADIG	83	GKTGPLGLAGEKGDQGETGKKGPIGPEGEKGEVGPVPPGPKGDRGEQDGLPGVC	139
<i>Oryctolagus cuniculus</i> ADIG	83	GKTGPLGLAGEKGDQGETGKKGPMGPEGEKGEVGPVPPGPKGDRGEQDGLPGVC	139
<i>Tursiops truncatus</i> ADIG	135	GKTGPLGLAGEKGDQGETGKKGPMGPEGEKGEVGPVPPGPKGDRGEQDGLPGVC	191
<i>Bos taurus</i> ADIG	83	GKAGPLGLAGEKGDQGETGKKGPMGPEGEKGEVGPVPPGPKGDRGEQDGLPGVC	139
<i>Equus caballus</i> ADIG	124	GKTGPLGLAGEKGDQGETGKKGPMGPEGEKGEVGPVPPGPKGDRGEQDGLPGVC	180
<i>Canis lupus familiaris</i> ADIG	124	GKTGPLGLAGEKGDQGETGKKGPMGPEGEKGEVGPVPPGPKGDRGEQDGLPGVC	180
<i>Myotis lucifugus</i> ADIG	83	GKTGPLGLAGEKGDQGETGKKGPMGPEGEKGEVGPVPPGPKGDRGEQDGLPGVC	139
<i>Homo sapiens</i> ADIH	85	GRTGNRGKPKGKAGAI	141
<i>Pan troglodytes</i> ADIH	85	GRTGNRGKPKGKAGAI	141
<i>Pongo abelii</i> ADIH	85	GRTGNRGKPKGKAGAI	141
<i>Nomascus leucogenys</i> ADIH	85	GRTGNRGKPKGKAGAI	141
<i>Macaca mulatta</i> ADIH	85	GRTGNRGKPKGKAGAI	141
<i>Papio hamadryas</i> ADIH	85	GRTGNRGKPKGKAGAI	141
<i>Mus musculus</i> Adih	92	GRTGNRGKQGP	148
<i>Rattus norvegicus</i> Adih	129	GRTGNRGKQGP	185
<i>Dipodomys ordii</i> ADIH	85	GRTGNRGKQGP	141
<i>Cavia porcellus</i> ADIH	85	GRTGNRGKQGP	141
<i>Bos taurus</i> ADIH	102	GRTGNRGKQGP	158
<i>Equus caballus</i> ADIH	85	GRTGNRGKQGP	141
<i>Canis lupus familiaris</i> ADIH	85	GRTGNRGKQGP	141
<i>Pteropus vampyrus</i> ADIH	85	GRTGNRGKQGP	141
<i>Loxodonta africana</i> ADIH	85	GRAGNRGKQGP	141
<i>Homo sapiens</i> ADII	-	-	-
<i>Pongo abelii</i> ADII	-	-	-
<i>Macaca mulatta</i> ADII	-	-	-
<i>Mus musculus</i> Adii	-	-	-
<i>Rattus norvegicus</i> Adii	-	-	-
<i>Bos taurus</i> ADII	-	-	-
<i>Canis lupus familiaris</i> ADII	-	-	-
<i>Dasyurus novemcinctus</i> ADII	-	-	-
<i>Homo sapiens</i> ADIJ	-	-	-
<i>Pan troglodytes</i> ADIJ	-	-	-
<i>Papio hamadryas</i> ADIJ	-	-	-
<i>Mus musculus</i> Adij	-	-	-
<i>Rattus norvegicus</i> Adij	-	-	-
<i>Oryctolagus cuniculus</i> ADIJ	-	-	-
<i>Bos taurus</i> ADIJ	-	-	-
<i>Canis lupus familiaris</i> ADIJ	-	-	-
<i>Loxodonta africana</i> ADIJ	-	-	-
<i>Homo sapiens</i> ADIK	-	-	-
<i>Pan troglodytes</i> ADIK	-	-	-
<i>Gorilla gorilla</i> ADIK	-	-	-
<i>Papio hamadryas</i> ADIK	-	-	-
<i>Callithrix jacchus</i> ADIK	-	-	-
<i>Rattus norvegicus</i> Adik	-	-	-
<i>Cavia porcellus</i> ADIK	-	-	-
<i>Equus caballus</i> ADIK	-	-	-
<i>Canis lupus familiaris</i> ADIK	-	-	-
<i>Dasyurus novemcinctus</i> ADIK	-	-	-
<i>Loxodonta africana</i> ADIK	-	-	-
<i>Mus musculus</i> Adil	-	-	-
<i>Rattus norvegicus</i> Adil	-	-	-
<i>Homo sapiens</i> ADIM	178	-----NHGNNNGNNGATGHEGAKGEKGDKGLGPRGERGQHGPKEKGYPGIP	224
<i>Pan troglodytes</i> ADIM	178	-----NHGNNNGNNGATGHEGAKGEKGDKGLGPRGERGQHGPKEKGYPGIP	224

<i>Pongo abelii</i> ADIM	134	-----NHGNNNGNNGATGHEGAKGEKGDKGDLDLPRGERGQHGPKEKGYPGIP---	180
<i>Nomascus leucogenys</i> ADIM	178	-----NHGNNNGNNGATGHEGAKGEKGDKGDLDLPRGERGQHGPKEKGYPGIP---	224
<i>Papio hamadryas</i> ADIM	178	-----NHGNNNGNNGATGHEGAKGEKGDKGDLDLPRGERGQHGPKEKGYPGIP---	224
<i>Callithrix jacchus</i> ADIM	168	-----NHGNNNGNNGATGHEGAKGEKGDKGDLDLPRGERGQHGPKEKGYPGIP---	214
<i>Mus musculus</i> Adim	67	-----NHGNNNGNNGATGHEGAKGEKGDKGDLDLPRGERGQHGPKEKGYPGVP---	113
<i>Rattus norvegicus</i> Adim	141	-----NHGNNNGNNGATGHEGAKGEKGDKGDLDLPRGERGQHGPKEKGYPGVP---	187
<i>Cavia porcellus</i> ADIM	134	-----NHGNNNGNNGATGHEGAKGEKGDKGDLDLPRGERGQHGPKEKGSFGIP---	180
<i>Bos taurus</i> ADIM	67	-----NHGNNNGNNGATGHEGAKGEKGDKGDLDLPRGERGQHGPKEKGYPGIP---	113
<i>Equus caballus</i> ADIM	67	-----NHGNNNGNNGATGHEGAKGEKGDKGDLDLPRGERGQHGPKEKGHPPGIP---	113
<i>Canis lupus familiaris</i> ADIM	128	-----NHGNNNGNNGATGHEGAKGEKGDKGDLDLPRGERGQHGPKEKGYPGIP---	174
<i>Homo sapiens</i> ADIN	17	-----LGP	19
<i>Pan troglodytes</i> ADIN	17	-----LGP	19
<i>Pongo abelii</i> ADIN	17	-----LGP	19
<i>Nomascus leucogenys</i> ADIN	17	-----LGP	19
<i>Macaca mulatta</i> ADIN	17	-----LGP	19
<i>Callithrix jacchus</i> ADIN	17	-----LGP	19
<i>Mus musculus</i> Adin	17	-----LGP	19
<i>Cavia porcellus</i> ADIN	28	-----LGP	30
<i>Tursiops truncatus</i> ADIN	17	-----LGP	19
<i>Canis lupus familiaris</i> ADIN	17	-----LGP	19
<i>Dasyops novemcinctus</i> ADIN	17	-----LGA	19
<i>Loxodonta africana</i> ADIN	17	-----LGP	19
<i>Homo sapiens</i> ADIO	71	-----EKGEAGVRGRAGRSKKEGPPGARGLQGRKQKQGVPPGAA---	111
<i>Pan troglodytes</i> ADIO	71	-----EKGEAGVRGRAGRSKKEGLPGARGLQGRKQKQGVPPGAA---	111
<i>Macaca mulatta</i> ADIO	66	-----EKGEAGVRGRAGRSKKEGPPGARGLQGRKQKQGVPPGAP---	106
<i>Bos taurus</i> ADIO	70	-----EKGEAGVRGRSRSRSKKEGPPSRLRGRKQKQAGLPGAQ---	110
<i>Myotis lucifugus</i> ADIO	70	-----EKGETGVRGRSRSRSKKEGPPSPGLRHKQKQGVGLPGTP---	110
<i>Homo sapiens</i> ADIP	198	-----EKGDRGDRGLQGGKYGKTGSAGARGHTGPKQKGSMPAGER---	238
<i>Otolemur garnettii</i> ADIP	100	-----EKGDRGDRGLQGGKYGKTGSAGARGHVGPQKQKGSMPGDR---	140
<i>Mus musculus</i> Adip	100	-----EKGDRGDRGLQGGKYGKTGSAGARGHVGPQKQKGSMPGDR---	140
<i>Cavia porcellus</i> ADIP	100	-----EKGDRGDRGLQGGKYGKTGSAGARGHVGPQKQKGSMPGDR---	140
<i>Bos taurus</i> ADIP	123	-----EKGDRGDRGLQGGKYGKTGSAGARGHTGPKQKQKGSMPGDR---	163
<i>Equus caballus</i> ADIP	98	-----EKGDRGDRGLQGGKYGKPGSVGARGHVGPQKQKGSMPGDR---	138
<i>Loxodonta africana</i> ADIP	152	-----EKGDRGDRGLQGGKYGKTGSAGARGHMGPKQKQKGSMPGDR---	192
<i>Homo sapiens</i> ADIQ	98	-----DKGDPGPMGLPGYMGREGPQGEPPGQGSKDKGEMGSPGAP---	138
<i>Pan troglodytes</i> ADIQ	98	-----DKGDPGPMGLPGYMGREGPQGEPPGQGSKDKGEMGSPGAP---	138
<i>Pongo abelii</i> ADIQ	98	-----DKGDPGPMGLPGYMGREGPQGEPPGQGSKDKGEMGSPGAP---	138
<i>Nomascus leucogenys</i> ADIQ	98	-----DKGDPGPMGLPGYMGREGPQGEPPGQGSKDKGEMGSPGAP---	138
<i>Macaca mulatta</i> ADIQ	98	-----DKGDPGAMGLPGHMGREGPQGEPPGQGSKDKGEMGSPSAP---	138
<i>Mus musculus</i> Adiq	84	-----DKGDRGPTGTPGKPKNGNTRGDRGSQGVKDKGQAGSPGSS---	124
<i>Rattus norvegicus</i> Adiq	83	-----DKGDRGPTGTPGKPKNGNTRGDRGSQGVKDKGQAGSPGSS---	123
<i>Homo sapiens</i> ADIR	-	-----	-
<i>Pan troglodytes</i> ADIR	-	-----	-
<i>Pongo abelii</i> ADIR	-	-----	-
<i>Nomascus leucogenys</i> ADIR	-	-----	-
<i>Macaca mulatta</i> ADIR	-	-----	-
<i>Papio hamadryas</i> ADIR	-	-----	-
<i>Callithrix jacchus</i> ADIR	-	-----	-
<i>Tarsius syrichta</i> ADIR	-	-----	-
<i>Otolemur garnettii</i> ADIR	-	-----	-
<i>Tupaia belangeri</i> ADIR	-	-----	-
<i>Mus musculus</i> Adir	-	-----	-
<i>Rattus norvegicus</i> Adir	-	-----	-
<i>Cavia porcellus</i> ADIR	-	-----	-
<i>Oryctolagus cuniculus</i> ADIR	-	-----	-
<i>Tursiops truncatus</i> ADIR	-	-----	-
<i>Bos taurus</i> ADIR	-	-----	-
<i>Equus caballus</i> ADIR	-	-----	-
<i>Canis lupus familiaris</i> ADIR	-	-----	-
<i>Myotis lucifugus</i> ADIR	-	-----	-
<i>Pteropus vampyrus</i> ADIR	-	-----	-
<i>Erinaceus europaeus</i> ADIR	-	-----	-
<i>Dasyops novemcinctus</i> ADIR	-	-----	-
<i>Choloepus hoffmanni</i> ADIR	-	-----	-
<i>Loxodonta africana</i> ADIR	-	-----	-



	490	500	510	520	530	540
<i>Homo sapiens</i> ADIA						
<i>Homo sapiens</i> ADIA						
<i>Papio hamadryas</i> ADIA						
<i>Mus musculus</i> Adia						
<i>Rattus norvegicus</i> Adia						
<i>Cavia porcellus</i> ADIA						
<i>Ochotona princeps</i> ADIA						
<i>Bos taurus</i> ADIA						
<i>Equus caballus</i> ADIA						
<i>Canis lupus familiaris</i> ADIA						
<i>Felis catus</i> ADIA						
<i>Myotis lucifugus</i> ADIA						
<i>Dasyopus novemcinctus</i> ADIA						
<i>Loxodonta africana</i> ADIA						
<i>Homo sapiens</i> ADIB						
<i>Pan troglodytes</i> ADIB						
<i>Pongo abelii</i> ADIB						
<i>Nomascus leucogenys</i> ADIB						
<i>Callithrix jacchus</i> ADIB						
<i>Otolemur garnettii</i> ADIB						
<i>Mus musculus</i> Adib						
<i>Rattus norvegicus</i> Adib						
<i>Cavia porcellus</i> ADIB						
<i>Oryctolagus cuniculus</i> ADIB						
<i>Bos taurus</i> ADIB						
<i>Equus caballus</i> ADIB						
<i>Canis lupus familiaris</i> ADIB						
<i>Myotis lucifugus</i> ADIB						
<i>Loxodonta africana</i> ADIB						
<i>Homo sapiens</i> ADIC						
<i>Macaca mulatta</i> ADIC						
<i>Papio hamadryas</i> ADIC						
<i>Callithrix jacchus</i> ADIC						
<i>Mus musculus</i> Adic						
<i>Rattus norvegicus</i> Adic						
<i>Cavia porcellus</i> ADIC						
<i>Oryctolagus cuniculus</i> ADIC						
<i>Equus caballus</i> ADIC						
<i>Canis lupus familiaris</i> ADIC						
<i>Myotis lucifugus</i> ADIC						
<i>Loxodonta africana</i> ADIC						
<i>Homo sapiens</i> ADID						
<i>Pan troglodytes</i> ADID						
<i>Pongo abelii</i> ADID						
<i>Nomascus leucogenys</i> ADID						
<i>Macaca mulatta</i> ADID						
<i>Otolemur garnettii</i> ADID						
<i>Mus musculus</i> Adid						
<i>Rattus norvegicus</i> Adid						
<i>Cavia porcellus</i> ADID						
<i>Oryctolagus cuniculus</i> ADID						
<i>Bos taurus</i> ADID						
<i>Equus caballus</i> ADID						
<i>Canis lupus familiaris</i> ADID						
<i>Felis catus</i> ADID						
<i>Myotis lucifugus</i> ADID						
<i>Dasyopus novemcinctus</i> ADID						
<i>Loxodonta africana</i> ADID						
<i>Homo sapiens</i> ADIE						
<i>Pan troglodytes</i> ADIE						
<i>Pongo abelii</i> ADIE						
<i>Papio hamadryas</i> ADIE						
<i>Callithrix jacchus</i> ADIE						
<i>Otolemur garnettii</i> ADIE						
<i>Mus musculus</i> Adie						
<i>Rattus norvegicus</i> Adie						
<i>Homo sapiens</i> ADIF1						
<i>Homo sapiens</i> ADIF2						
<i>Pan troglodytes</i> ADIF1						
<i>Pongo abelii</i> ADIF1						
<i>Nomascus leucogenys</i> ADIF1						
<i>Macaca mulatta</i> ADIF1						
<i>Papio hamadryas</i> ADIF1						

<i>Microcebus murinus</i> ADIF1	-	-----	-
<i>Otolemur garnettii</i> ADIF1	-	-----	-
<i>Mus musculus</i> Adif1	-	-----	-
<i>Rattus norvegicus</i> Adif1	-	-----	-
<i>Cavia porcellus</i> ADIF1	-	-----	-
<i>Oryctolagus cuniculus</i> ADIF1	-	-----	-
<i>Ochotona princeps</i> ADIF1	-	-----	-
<i>Bos taurus</i> ADIF1	-	-----	-
<i>Equus caballus</i> ADIF1	-	-----	-
<i>Canis lupus familiaris</i> ADIF1	-	-----	-
<i>Felis catus</i> ADIF1	-	-----	-
<i>Dasyopus novemcinctus</i> ADIF1	-	-----	-
<i>Loxodonta africana</i> ADIF1	-	-----	-
<i>Homo sapiens</i> ADIG	-	-----	-
<i>Pan troglodytes</i> ADIG	-	-----	-
<i>Pongo abelii</i> ADIG	-	-----	-
<i>Callithrix jacchus</i> ADIG	-	-----	-
<i>Otolemur garnettii</i> ADIG	-	-----	-
<i>Mus musculus</i> Adig	-	-----	-
<i>Rattus norvegicus</i> Adig	-	-----	-
<i>Cavia porcellus</i> ADIG	-	-----	-
<i>Oryctolagus cuniculus</i> ADIG	-	-----	-
<i>Tursiops truncatus</i> ADIG	-	-----	-
<i>Bos taurus</i> ADIG	-	-----	-
<i>Equus caballus</i> ADIG	-	-----	-
<i>Canis lupus familiaris</i> ADIG	-	-----	-
<i>Myotis lucifugus</i> ADIG	-	-----	-
<i>Homo sapiens</i> ADIH	-	-----	-
<i>Pan troglodytes</i> ADIH	-	-----	-
<i>Pongo abelii</i> ADIH	-	-----	-
<i>Nomascus leucogenys</i> ADIH	-	-----	-
<i>Macaca mulatta</i> ADIH	-	-----	-
<i>Papio hamadryas</i> ADIH	-	-----	-
<i>Mus musculus</i> Adih	-	-----	-
<i>Rattus norvegicus</i> Adih	-	-----	-
<i>Dipodomys ordii</i> ADIH	-	-----	-
<i>Cavia porcellus</i> ADIH	-	-----	-
<i>Bos taurus</i> ADIH	-	-----	-
<i>Equus caballus</i> ADIH	-	-----	-
<i>Canis lupus familiaris</i> ADIH	-	-----	-
<i>Pteropus vampyrus</i> ADIH	-	-----	-
<i>Loxodonta africana</i> ADIH	-	-----	-
<i>Homo sapiens</i> ADII	-	-----	-
<i>Pongo abelii</i> ADII	-	-----	-
<i>Macaca mulatta</i> ADII	-	-----	-
<i>Mus musculus</i> Adii	-	-----	-
<i>Rattus norvegicus</i> Adii	-	-----	-
<i>Bos taurus</i> ADII	-	-----	-
<i>Canis lupus familiaris</i> ADII	-	-----	-
<i>Dasyopus novemcinctus</i> ADII	-	-----	-
<i>Homo sapiens</i> ADIJ	-	-----	-
<i>Pan troglodytes</i> ADIJ	-	-----	-
<i>Papio hamadryas</i> ADIJ	-	-----	-
<i>Mus musculus</i> Adij	-	-----	-
<i>Rattus norvegicus</i> Adij	-	-----	-
<i>Oryctolagus cuniculus</i> ADIJ	-	-----	-
<i>Bos taurus</i> ADIJ	-	-----	-
<i>Canis lupus familiaris</i> ADIJ	-	-----	-
<i>Loxodonta africana</i> ADIJ	-	-----	-
<i>Homo sapiens</i> ADIK	-	-----	-
<i>Pan troglodytes</i> ADIK	-	-----	-
<i>Gorilla gorilla</i> ADIK	-	-----	-
<i>Papio hamadryas</i> ADIK	-	-----	-
<i>Callithrix jacchus</i> ADIK	-	-----	-
<i>Rattus norvegicus</i> Adik	-	-----	-
<i>Cavia porcellus</i> ADIK	-	-----	-
<i>Equus caballus</i> ADIK	-	-----	-
<i>Canis lupus familiaris</i> ADIK	-	-----	-
<i>Dasyopus novemcinctus</i> ADIK	-	-----	-
<i>Loxodonta africana</i> ADIK	-	-----	-
<i>Mus musculus</i> Adil	-	-----	-
<i>Rattus norvegicus</i> Adil	-	-----	-
<i>Homo sapiens</i> ADIM	-	-----	-
<i>Pan troglodytes</i> ADIM	-	-----	-

<i>Pongo abelii</i> ADIM	-	-----	-
<i>Nomascus leucogenys</i> ADIM	-	-----	-
<i>Papio hamadryas</i> ADIM	-	-----	-
<i>Callithrix jacchus</i> ADIM	-	-----	-
<i>Mus musculus</i> Adim	-	-----	-
<i>Rattus norvegicus</i> Adim	-	-----	-
<i>Cavia porcellus</i> ADIM	-	-----	-
<i>Bos taurus</i> ADIM	-	-----	-
<i>Equus caballus</i> ADIM	-	-----	-
<i>Canis lupus familiaris</i> ADIM	-	-----	-
<i>Homo sapiens</i> ADIN	20	TPGPGSSELRSAFSAARTTPLEGTSEMAVTFDKVYVNI	79
<i>Pan troglodytes</i> ADIN	20	TPGPGSSELRSAFSAARTTPLEGTSEMAVTFDKVYVNI	79
<i>Pongo abelii</i> ADIN	20	APGPGSSELRSAFSAARTTPLEGTSEMAVTFDKVYVNI	79
<i>Nomascus leucogenys</i> ADIN	20	ALGPGSSELRSAFSAARTTPLEGTSEMAVTFDKVYVNI	79
<i>Macaca mulatta</i> ADIN	20	APGPGSSELRSAFSAARTTPLEGASEMAVTFDKVYVNI	79
<i>Callithrix jacchus</i> ADIN	20	APGPGSSELRSAFSAARTTPLEGTSEMAVTFDKVYVNI	79
<i>Mus musculus</i> Adin	20	A-GPGSSELRSAFSAARTTPLEGTSEMAVTFDKVYVNI	78
<i>Cavia porcellus</i> ADIN	31	APGPDSTGLRSAFSAVRTTPLEGTSEMAVTFDKVLVNI	90
<i>Tursiops truncatus</i> ADIN	20	ALG--STELRSAFSAARITPLEGTSEMAVTFDKVYVNI	77
<i>Canis lupus familiaris</i> ADIN	20	APG--SAELRSAFSAARTTPLEGTSEMAVTFDKVYVNI	77
<i>Dasyopus novemcinctus</i> ADIN	20	APG--SSELRSAFSAARTSSLEGTSEMAVTFDKVFNIG	77
<i>Loxodonta africana</i> ADIN	20	APG--SSELRSAFSAARTSPLEGTSEMAVTFDKVYVNI	77
<i>Homo sapiens</i> ADIO	-	-----	-
<i>Pan troglodytes</i> ADIO	-	-----	-
<i>Macaca mulatta</i> ADIO	-	-----	-
<i>Bos taurus</i> ADIO	-	-----	-
<i>Myotis lucifugus</i> ADIO	-	-----	-
<i>Homo sapiens</i> ADIP	-	-----	-
<i>Otolemur garnettii</i> ADIP	-	-----	-
<i>Mus musculus</i> Adip	-	-----	-
<i>Cavia porcellus</i> ADIP	-	-----	-
<i>Bos taurus</i> ADIP	-	-----	-
<i>Equus caballus</i> ADIP	-	-----	-
<i>Loxodonta africana</i> ADIP	-	-----	-
<i>Homo sapiens</i> ADIQ	-	-----	-
<i>Pan troglodytes</i> ADIQ	-	-----	-
<i>Pongo abelii</i> ADIQ	-	-----	-
<i>Nomascus leucogenys</i> ADIQ	-	-----	-
<i>Macaca mulatta</i> ADIQ	-	-----	-
<i>Mus musculus</i> Adiq	-	-----	-
<i>Rattus norvegicus</i> Adiq	-	-----	-
<i>Homo sapiens</i> ADIR	-	-----	-
<i>Pan troglodytes</i> ADIR	-	-----	-
<i>Pongo abelii</i> ADIR	-	-----	-
<i>Nomascus leucogenys</i> ADIR	-	-----	-
<i>Macaca mulatta</i> ADIR	-	-----	-
<i>Papio hamadryas</i> ADIR	-	-----	-
<i>Callithrix jacchus</i> ADIR	-	-----	-
<i>Tarsius syrichta</i> ADIR	-	-----	-
<i>Otolemur garnettii</i> ADIR	-	-----	-
<i>Tupaia belangeri</i> ADIR	-	-----	-
<i>Mus musculus</i> Adir	-	-----	-
<i>Rattus norvegicus</i> Adir	-	-----	-
<i>Cavia porcellus</i> ADIR	-	-----	-
<i>Oryctolagus cuniculus</i> ADIR	-	-----	-
<i>Tursiops truncatus</i> ADIR	-	-----	-
<i>Bos taurus</i> ADIR	-	-----	-
<i>Equus caballus</i> ADIR	-	-----	-
<i>Canis lupus familiaris</i> ADIR	-	-----	-
<i>Myotis lucifugus</i> ADIR	-	-----	-
<i>Pteropus vampyrus</i> ADIR	-	-----	-
<i>Erinaceus europaeus</i> ADIR	-	-----	-
<i>Dasyopus novemcinctus</i> ADIR	-	-----	-
<i>Choloepus hoffmanni</i> ADIR	-	-----	-
<i>Loxodonta africana</i> ADIR	-	-----	-

	550	560	570	580	590	600
<i>Homo sapiens</i> ADIA						
<i>Homo sapiens</i> ADIA						
<i>Papio hamadryas</i> ADIA						
<i>Mus musculus</i> Adia						
<i>Rattus norvegicus</i> Adia						
<i>Cavia porcellus</i> ADIA						
<i>Ochotona princeps</i> ADIA						
<i>Bos taurus</i> ADIA						
<i>Equus caballus</i> ADIA						
<i>Canis lupus familiaris</i> ADIA						
<i>Felis catus</i> ADIA						
<i>Myotis lucifugus</i> ADIA						
<i>Dasyopus novemcinctus</i> ADIA						
<i>Loxodonta africana</i> ADIA						
<i>Homo sapiens</i> ADIB						
<i>Pan troglodytes</i> ADIB						
<i>Pongo abelii</i> ADIB						
<i>Nomascus leucogenys</i> ADIB						
<i>Callithrix jacchus</i> ADIB						
<i>Otolemur garnettii</i> ADIB						
<i>Mus musculus</i> Adib						
<i>Rattus norvegicus</i> Adib						
<i>Cavia porcellus</i> ADIB						
<i>Oryctolagus cuniculus</i> ADIB						
<i>Bos taurus</i> ADIB						
<i>Equus caballus</i> ADIB						
<i>Canis lupus familiaris</i> ADIB						
<i>Myotis lucifugus</i> ADIB						
<i>Loxodonta africana</i> ADIB						
<i>Homo sapiens</i> ADIC						
<i>Macaca mulatta</i> ADIC						
<i>Papio hamadryas</i> ADIC						
<i>Callithrix jacchus</i> ADIC						
<i>Mus musculus</i> Adic						
<i>Rattus norvegicus</i> Adic						
<i>Cavia porcellus</i> ADIC						
<i>Oryctolagus cuniculus</i> ADIC						
<i>Equus caballus</i> ADIC						
<i>Canis lupus familiaris</i> ADIC						
<i>Myotis lucifugus</i> ADIC						
<i>Loxodonta africana</i> ADIC						
<i>Homo sapiens</i> ADID						
<i>Pan troglodytes</i> ADID						
<i>Pongo abelii</i> ADID						
<i>Nomascus leucogenys</i> ADID						
<i>Macaca mulatta</i> ADID						
<i>Otolemur garnettii</i> ADID						
<i>Mus musculus</i> Adid						
<i>Rattus norvegicus</i> Adid						
<i>Cavia porcellus</i> ADID						
<i>Oryctolagus cuniculus</i> ADID						
<i>Bos taurus</i> ADID						
<i>Equus caballus</i> ADID						
<i>Canis lupus familiaris</i> ADID						
<i>Felis catus</i> ADID						
<i>Myotis lucifugus</i> ADID						
<i>Dasyopus novemcinctus</i> ADID						
<i>Loxodonta africana</i> ADID						
<i>Homo sapiens</i> ADIE						
<i>Pan troglodytes</i> ADIE						
<i>Pongo abelii</i> ADIE						
<i>Papio hamadryas</i> ADIE						
<i>Callithrix jacchus</i> ADIE						
<i>Otolemur garnettii</i> ADIE						
<i>Mus musculus</i> Adie						
<i>Rattus norvegicus</i> Adie						
<i>Homo sapiens</i> ADIF1						
<i>Homo sapiens</i> ADIF2						
<i>Pan troglodytes</i> ADIF1						
<i>Pongo abelii</i> ADIF1						
<i>Nomascus leucogenys</i> ADIF1						
<i>Macaca mulatta</i> ADIF1						
<i>Papio hamadryas</i> ADIF1						

<i>Microcebus murinus</i> ADIF1	-	-----	-
<i>Otolemur garnettii</i> ADIF1	-	-----	-
<i>Mus musculus</i> Adif1	-	-----	-
<i>Rattus norvegicus</i> Adif1	-	-----	-
<i>Cavia porcellus</i> ADIF1	-	-----	-
<i>Oryctolagus cuniculus</i> ADIF1	-	-----	-
<i>Ochotona princeps</i> ADIF1	-	-----	-
<i>Bos taurus</i> ADIF1	-	-----	-
<i>Equus caballus</i> ADIF1	-	-----	-
<i>Canis lupus familiaris</i> ADIF1	-	-----	-
<i>Felis catus</i> ADIF1	-	-----	-
<i>Dasyopus novemcinctus</i> ADIF1	-	-----	-
<i>Loxodonta africana</i> ADIF1	-	-----	-
<i>Homo sapiens</i> ADIG	-	-----	-
<i>Pan troglodytes</i> ADIG	-	-----	-
<i>Pongo abelii</i> ADIG	-	-----	-
<i>Callithrix jacchus</i> ADIG	-	-----	-
<i>Otolemur garnettii</i> ADIG	-	-----	-
<i>Mus musculus</i> Adig	-	-----	-
<i>Rattus norvegicus</i> Adig	-	-----	-
<i>Cavia porcellus</i> ADIG	-	-----	-
<i>Oryctolagus cuniculus</i> ADIG	-	-----	-
<i>Tursiops truncatus</i> ADIG	-	-----	-
<i>Bos taurus</i> ADIG	-	-----	-
<i>Equus caballus</i> ADIG	-	-----	-
<i>Canis lupus familiaris</i> ADIG	-	-----	-
<i>Myotis lucifugus</i> ADIG	-	-----	-
<i>Homo sapiens</i> ADIH	-	-----	-
<i>Pan troglodytes</i> ADIH	-	-----	-
<i>Pongo abelii</i> ADIH	-	-----	-
<i>Nomascus leucogenys</i> ADIH	-	-----	-
<i>Macaca mulatta</i> ADIH	-	-----	-
<i>Papio hamadryas</i> ADIH	-	-----	-
<i>Mus musculus</i> Adih	-	-----	-
<i>Rattus norvegicus</i> Adih	-	-----	-
<i>Dipodomys ordii</i> ADIH	-	-----	-
<i>Cavia porcellus</i> ADIH	-	-----	-
<i>Bos taurus</i> ADIH	-	-----	-
<i>Equus caballus</i> ADIH	-	-----	-
<i>Canis lupus familiaris</i> ADIH	-	-----	-
<i>Pteropus vampyrus</i> ADIH	-	-----	-
<i>Loxodonta africana</i> ADIH	-	-----	-
<i>Homo sapiens</i> ADII	-	-----	-
<i>Pongo abelii</i> ADII	-	-----	-
<i>Macaca mulatta</i> ADII	-	-----	-
<i>Mus musculus</i> Adii	-	-----	-
<i>Rattus norvegicus</i> Adii	-	-----	-
<i>Bos taurus</i> ADII	-	-----	-
<i>Canis lupus familiaris</i> ADII	-	-----	-
<i>Dasyopus novemcinctus</i> ADII	-	-----	-
<i>Homo sapiens</i> ADIJ	-	-----	-
<i>Pan troglodytes</i> ADIJ	-	-----	-
<i>Papio hamadryas</i> ADIJ	-	-----	-
<i>Mus musculus</i> Adij	-	-----	-
<i>Rattus norvegicus</i> Adij	-	-----	-
<i>Oryctolagus cuniculus</i> ADIJ	-	-----	-
<i>Bos taurus</i> ADIJ	-	-----	-
<i>Canis lupus familiaris</i> ADIJ	-	-----	-
<i>Loxodonta africana</i> ADIJ	-	-----	-
<i>Homo sapiens</i> ADIK	-	-----	-
<i>Pan troglodytes</i> ADIK	-	-----	-
<i>Gorilla gorilla</i> ADIK	-	-----	-
<i>Papio hamadryas</i> ADIK	-	-----	-
<i>Callithrix jacchus</i> ADIK	-	-----	-
<i>Rattus norvegicus</i> Adik	-	-----	-
<i>Cavia porcellus</i> ADIK	-	-----	-
<i>Equus caballus</i> ADIK	-	-----	-
<i>Canis lupus familiaris</i> ADIK	-	-----	-
<i>Dasyopus novemcinctus</i> ADIK	-	-----	-
<i>Loxodonta africana</i> ADIK	-	-----	-
<i>Mus musculus</i> Adil	-	-----	-
<i>Rattus norvegicus</i> Adil	-	-----	-
<i>Homo sapiens</i> ADIM	-	-----	-
<i>Pan troglodytes</i> ADIM	-	-----	-

<i>Pongo abelii</i> ADIM	-	-----	-
<i>Nomascus leucogenys</i> ADIM	-	-----	-
<i>Papio hamadryas</i> ADIM	-	-----	-
<i>Callithrix jacchus</i> ADIM	-	-----	-
<i>Mus musculus</i> Adim	-	-----	-
<i>Rattus norvegicus</i> Adim	-	-----	-
<i>Cavia porcellus</i> ADIM	-	-----	-
<i>Bos taurus</i> ADIM	-	-----	-
<i>Equus caballus</i> ADIM	-	-----	-
<i>Canis lupus familiaris</i> ADIM	-	-----	-
<i>Homo sapiens</i> ADIN	80	FTAGKAPHKSLSVMLVRNRDEVQALAFDEQRRPGARRAASQSAMLQLDYGDTVWLRRLHGA	139
<i>Pan troglodytes</i> ADIN	80	FTAGKAPHKSLSVMLVRNRDEVQALAFDEQRRPGARRAASQSAMLQLDYGDTVWLRRLHGA	139
<i>Pongo abelii</i> ADIN	80	FTAGKAPHKSLSVMLVRNRDEVQALAFDEQRRPGARRAASQSAMLQLDYGDTVWLRRLHGA	139
<i>Nomascus leucogenys</i> ADIN	80	FTAGKAPHKSLSVMLVRNRDEVQALAFDEQRRPGARRAASQSAMLQLDYGDTVWLRRLHGA	139
<i>Macaca mulatta</i> ADIN	80	FTVGKAPHKSLSVMLVRNHDEVQALAFDEQRRPSARRAASQSAMLQLDYGDTVWLRRLHGS	139
<i>Callithrix jacchus</i> ADIN	80	FTAGKAPHKSLSVMLVRNRDEVQALAFDEQRRPSARRAASQSAMLQLDYGDTVWLRRLHGA	139
<i>Mus musculus</i> Adin	79	FTAGKAPHKSLSVMLVRNRDEVQALAFDEQRRPGARRAASQSAMLQLDYGDTVWLRRLHGA	138
<i>Cavia porcellus</i> ADIN	91	FTAGKAPHKSLSVMLVRNRDEVQALAFDEQRRPGTRRAASQSAMLQLDYGDTVWLRRLHGA	150
<i>Tursiops truncatus</i> ADIN	78	FTAGKAPHKSLSVMLVRNRDEVQALAFDEQRRPATRHAASQSAMLQLDYGDTVWLRRLHGA	137
<i>Canis lupus familiaris</i> ADIN	78	FTAGKAPHKSLSVMLVRNRDEVQALAFDEQRRPGARRAASQSAMLQLDYGDTVWLRRLHGA	137
<i>Dasypus novemcinctus</i> ADIN	78	FTAGKAPHKSLSVMLVRNSDEVQTLAFDEQRRPGARRAASQSAMLQLDYGDTVWLRRLHGA	137
<i>Loxodonta africana</i> ADIN	78	FTAGKAPHKSLSVMLVRNRNEVQALAFDEQRRPGARRAASQSAMLQLDYGDTVWLRRLHGA	137
<i>Homo sapiens</i> ADIO	-	-----	-
<i>Pan troglodytes</i> ADIO	-	-----	-
<i>Macaca mulatta</i> ADIO	-	-----	-
<i>Bos taurus</i> ADIO	-	-----	-
<i>Myotis lucifugus</i> ADIO	-	-----	-
<i>Homo sapiens</i> ADIP	-	-----	-
<i>Otolemur garnettii</i> ADIP	-	-----	-
<i>Mus musculus</i> Adip	-	-----	-
<i>Cavia porcellus</i> ADIP	-	-----	-
<i>Bos taurus</i> ADIP	-	-----	-
<i>Equus caballus</i> ADIP	-	-----	-
<i>Loxodonta africana</i> ADIP	-	-----	-
<i>Homo sapiens</i> ADIQ	-	-----	-
<i>Pan troglodytes</i> ADIQ	-	-----	-
<i>Pongo abelii</i> ADIQ	-	-----	-
<i>Nomascus leucogenys</i> ADIQ	-	-----	-
<i>Macaca mulatta</i> ADIQ	-	-----	-
<i>Mus musculus</i> Adiq	-	-----	-
<i>Rattus norvegicus</i> Adiq	-	-----	-
<i>Homo sapiens</i> ADIR	-	-----	-
<i>Pan troglodytes</i> ADIR	-	-----	-
<i>Pongo abelii</i> ADIR	-	-----	-
<i>Nomascus leucogenys</i> ADIR	-	-----	-
<i>Macaca mulatta</i> ADIR	-	-----	-
<i>Papio hamadryas</i> ADIR	-	-----	-
<i>Callithrix jacchus</i> ADIR	-	-----	-
<i>Tarsius syrichta</i> ADIR	-	-----	-
<i>Otolemur garnettii</i> ADIR	-	-----	-
<i>Tupaia belangeri</i> ADIR	-	-----	-
<i>Mus musculus</i> Adir	-	-----	-
<i>Rattus norvegicus</i> Adir	-	-----	-
<i>Cavia porcellus</i> ADIR	-	-----	-
<i>Oryctolagus cuniculus</i> ADIR	-	-----	-
<i>Tursiops truncatus</i> ADIR	-	-----	-
<i>Bos taurus</i> ADIR	-	-----	-
<i>Equus caballus</i> ADIR	-	-----	-
<i>Canis lupus familiaris</i> ADIR	-	-----	-
<i>Myotis lucifugus</i> ADIR	-	-----	-
<i>Pteropus vampyrus</i> ADIR	-	-----	-
<i>Erinaceus europaeus</i> ADIR	-	-----	-
<i>Dasypus novemcinctus</i> ADIR	-	-----	-
<i>Choloepus hoffmanni</i> ADIR	-	-----	-
<i>Loxodonta africana</i> ADIR	-	-----	-

<i>Homo sapiens</i> ADIA	610	620	630	640	650	660
<i>Homo sapiens</i> ADIA						
<i>Papio hamadryas</i> ADIA						
<i>Mus musculus</i> Adia						
<i>Rattus norvegicus</i> Adia						
<i>Cavia porcellus</i> ADIA						
<i>Ochotona princeps</i> ADIA						
<i>Bos taurus</i> ADIA						
<i>Equus caballus</i> ADIA						
<i>Canis lupus familiaris</i> ADIA						
<i>Felis catus</i> ADIA						
<i>Myotis lucifugus</i> ADIA						
<i>Dasyopus novemcinctus</i> ADIA						
<i>Loxodonta africana</i> ADIA						
<i>Homo sapiens</i> ADIB						
<i>Pan troglodytes</i> ADIB						
<i>Pongo abelii</i> ADIB						
<i>Nomascus leucogenys</i> ADIB						
<i>Callithrix jacchus</i> ADIB						
<i>Otolemur garnettii</i> ADIB						
<i>Mus musculus</i> Adib						
<i>Rattus norvegicus</i> Adib						
<i>Cavia porcellus</i> ADIB						
<i>Oryctolagus cuniculus</i> ADIB						
<i>Bos taurus</i> ADIB						
<i>Equus caballus</i> ADIB						
<i>Canis lupus familiaris</i> ADIB						
<i>Myotis lucifugus</i> ADIB						
<i>Loxodonta africana</i> ADIB						
<i>Homo sapiens</i> ADIC						
<i>Macaca mulatta</i> ADIC						
<i>Papio hamadryas</i> ADIC						
<i>Callithrix jacchus</i> ADIC						
<i>Mus musculus</i> Adic						
<i>Rattus norvegicus</i> Adic						
<i>Cavia porcellus</i> ADIC						
<i>Oryctolagus cuniculus</i> ADIC						
<i>Equus caballus</i> ADIC						
<i>Canis lupus familiaris</i> ADIC						
<i>Myotis lucifugus</i> ADIC						
<i>Loxodonta africana</i> ADIC						
<i>Homo sapiens</i> ADID						
<i>Pan troglodytes</i> ADID						
<i>Pongo abelii</i> ADID						
<i>Nomascus leucogenys</i> ADID						
<i>Macaca mulatta</i> ADID						
<i>Otolemur garnettii</i> ADID						
<i>Mus musculus</i> Adid						
<i>Rattus norvegicus</i> Adid						
<i>Cavia porcellus</i> ADID						
<i>Oryctolagus cuniculus</i> ADID						
<i>Bos taurus</i> ADID						
<i>Equus caballus</i> ADID						
<i>Canis lupus familiaris</i> ADID						
<i>Felis catus</i> ADID						
<i>Myotis lucifugus</i> ADID						
<i>Dasyopus novemcinctus</i> ADID						
<i>Loxodonta africana</i> ADID						
<i>Homo sapiens</i> ADIE						
<i>Pan troglodytes</i> ADIE						
<i>Pongo abelii</i> ADIE						
<i>Papio hamadryas</i> ADIE						
<i>Callithrix jacchus</i> ADIE						
<i>Otolemur garnettii</i> ADIE						
<i>Mus musculus</i> Adie						
<i>Rattus norvegicus</i> Adie						
<i>Homo sapiens</i> ADIF1						
<i>Homo sapiens</i> ADIF2						
<i>Pan troglodytes</i> ADIF1						
<i>Pongo abelii</i> ADIF1						
<i>Nomascus leucogenys</i> ADIF1						
<i>Macaca mulatta</i> ADIF1						
<i>Papio hamadryas</i> ADIF1						

<i>Microcebus murinus</i> ADIF1	-	-----	-
<i>Otolemur garnettii</i> ADIF1	-	-----	-
<i>Mus musculus</i> Adif1	-	-----	-
<i>Rattus norvegicus</i> Adif1	-	-----	-
<i>Cavia porcellus</i> ADIF1	-	-----	-
<i>Oryctolagus cuniculus</i> ADIF1	-	-----	-
<i>Ochotona princeps</i> ADIF1	-	-----	-
<i>Bos taurus</i> ADIF1	-	-----	-
<i>Equus caballus</i> ADIF1	-	-----	-
<i>Canis lupus familiaris</i> ADIF1	-	-----	-
<i>Felis catus</i> ADIF1	-	-----	-
<i>Dasyopus novemcinctus</i> ADIF1	-	-----	-
<i>Loxodonta africana</i> ADIF1	-	-----	-
<i>Homo sapiens</i> ADIG	-	-----	-
<i>Pan troglodytes</i> ADIG	-	-----	-
<i>Pongo abelii</i> ADIG	-	-----	-
<i>Callithrix jacchus</i> ADIG	-	-----	-
<i>Otolemur garnettii</i> ADIG	-	-----	-
<i>Mus musculus</i> Adig	-	-----	-
<i>Rattus norvegicus</i> Adig	-	-----	-
<i>Cavia porcellus</i> ADIG	-	-----	-
<i>Oryctolagus cuniculus</i> ADIG	-	-----	-
<i>Tursiops truncatus</i> ADIG	-	-----	-
<i>Bos taurus</i> ADIG	-	-----	-
<i>Equus caballus</i> ADIG	-	-----	-
<i>Canis lupus familiaris</i> ADIG	-	-----	-
<i>Myotis lucifugus</i> ADIG	-	-----	-
<i>Homo sapiens</i> ADIH	-	-----	-
<i>Pan troglodytes</i> ADIH	-	-----	-
<i>Pongo abelii</i> ADIH	-	-----	-
<i>Nomascus leucogenys</i> ADIH	-	-----	-
<i>Macaca mulatta</i> ADIH	-	-----	-
<i>Papio hamadryas</i> ADIH	-	-----	-
<i>Mus musculus</i> Adih	-	-----	-
<i>Rattus norvegicus</i> Adih	-	-----	-
<i>Dipodomys ordii</i> ADIH	-	-----	-
<i>Cavia porcellus</i> ADIH	-	-----	-
<i>Bos taurus</i> ADIH	-	-----	-
<i>Equus caballus</i> ADIH	-	-----	-
<i>Canis lupus familiaris</i> ADIH	-	-----	-
<i>Pteropus vampyrus</i> ADIH	-	-----	-
<i>Loxodonta africana</i> ADIH	-	-----	-
<i>Homo sapiens</i> ADII	121	-----LTAGTASGVGVVGGGAGVGGDSEGEVTSALS	151
<i>Pongo abelii</i> ADII	121	-----LTAGTASGVGVVGGGAGVGGDSEGEVTSALS	151
<i>Macaca mulatta</i> ADII	121	-----LTAGTAGGVGVVGGGAGGAGDSEGEVTSALS	151
<i>Mus musculus</i> Adii	121	-----LT TSAAGGVGVVSGGTGGGGDTEGEVTSALS	151
<i>Rattus norvegicus</i> Adii	121	-----LT TSAAGGVGVVSGGTGGGGDTEGEVTSALS	151
<i>Bos taurus</i> ADII	121	-----LTAGAAGGVGVVGGGTGGGGDSEGEVTGALS	151
<i>Canis lupus familiaris</i> ADII	121	-----LAAGAAGGVGVVAGGGAGGGDSEGEVTGALS	151
<i>Dasyopus novemcinctus</i> ADII	121	-----LTAGAAGGVGVVAGGGAPGGGDSEGEVTGALG	151
<i>Homo sapiens</i> ADIJ	112	-----AAGAIS	117
<i>Pan troglodytes</i> ADIJ	112	-----AAGAIS	117
<i>Papio hamadryas</i> ADIJ	112	-----AAGAIS	117
<i>Mus musculus</i> Adij	112	-----AAGAIS	117
<i>Rattus norvegicus</i> Adij	112	-----AAGAIS	117
<i>Oryctolagus cuniculus</i> ADIJ	112	-----AAGAIS	117
<i>Bos taurus</i> ADIJ	112	-----AAGAIS	117
<i>Canis lupus familiaris</i> ADIJ	112	-----AAGAIS	117
<i>Loxodonta africana</i> ADIJ	112	-----AAGAIS	117
<i>Homo sapiens</i> ADIK	97	-----PGGVAP-	102
<i>Pan troglodytes</i> ADIK	97	-----PGGVAP-	102
<i>Gorilla gorilla</i> ADIK	97	-----PGGVAP-	102
<i>Papio hamadryas</i> ADIK	97	-----PGGVAP-	102
<i>Callithrix jacchus</i> ADIK	97	-----PGGVAP-	102
<i>Rattus norvegicus</i> Adik	97	-----PGGAAP-	102
<i>Cavia porcellus</i> ADIK	97	-----PGGAAP-	102
<i>Equus caballus</i> ADIK	97	-----PGGVAP-	102
<i>Canis lupus familiaris</i> ADIK	97	-----PGGVAP-	102
<i>Dasyopus novemcinctus</i> ADIK	97	-----PGGAAP-	102
<i>Loxodonta africana</i> ADIK	97	-----PGGVAP-	102
<i>Mus musculus</i> Adil	118	-----AIS	120
<i>Rattus norvegicus</i> Adil	118	-----AIS	120
<i>Homo sapiens</i> ADIM	-	-----	-
<i>Pan troglodytes</i> ADIM	-	-----	-



<i>Pongo abelii</i> ADIM	-	-----	-
<i>Nomascus leucogenys</i> ADIM	-	-----	-
<i>Papio hamadryas</i> ADIM	-	-----	-
<i>Callithrix jacchus</i> ADIM	-	-----	-
<i>Mus musculus</i> Adim	-	-----	-
<i>Rattus norvegicus</i> Adim	-	-----	-
<i>Cavia porcellus</i> ADIM	-	-----	-
<i>Bos taurus</i> ADIM	-	-----	-
<i>Equus caballus</i> ADIM	-	-----	-
<i>Canis lupus familiaris</i> ADIM	-	-----	-
<i>Homo sapiens</i> ADIN	140	PQYALGAPGATFSGYLVYADADA--DAPA-----RGPPA	171
<i>Pan troglodytes</i> ADIN	140	PQYALGAPGATFSGYLVYADADA--DAPA-----RGPPA	171
<i>Pongo abelii</i> ADIN	140	PQYALGAPGATFSGYLVYADADA--DAPA-----RGPPA	171
<i>Nomascus leucogenys</i> ADIN	140	PQYALGAPGATFSGYLVYADADA--DAPA-----	166
<i>Macaca mulatta</i> ADIN	140	PQYALGAPGATFSGYLVYADADADADADA-----RGPPA	173
<i>Callithrix jacchus</i> ADIN	140	PQYALGAPGATFSGYLVYADADA--DAPA-----RGPPA	171
<i>Mus musculus</i> Adin	139	PQYALGAPGATFSGYLVYADADA--DAPA-----RG-PA	169
<i>Cavia porcellus</i> ADIN	151	PQYALGSPGATFSGYLVYADADA--PAPA-----PG-PA	181
<i>Tursiops truncatus</i> ADIN	138	QQYALGAPGATFSGYLVYADAD---APA-----RGPPA	167
<i>Canis lupus familiaris</i> ADIN	138	PQYALGAPGATFSGYLVYADAD---APA-----RGPPA	167
<i>Dasyopus novemcinctus</i> ADIN	138	PQYALGAPGATFSGYLVYADAD---APA-----RGPPA	167
<i>Loxodonta africana</i> ADIN	138	PQYALGAPGATFSGYLVYADAD---APA-----RSPOG	167
<i>Homo sapiens</i> ADIO	-	-----	-
<i>Pan troglodytes</i> ADIO	-	-----	-
<i>Macaca mulatta</i> ADIO	-	-----	-
<i>Bos taurus</i> ADIO	-	-----	-
<i>Myotis lucifugus</i> ADIO	-	-----	-
<i>Homo sapiens</i> ADIP	-	-----	-
<i>Otolemur garnettii</i> ADIP	-	-----	-
<i>Mus musculus</i> Adip	-	-----	-
<i>Cavia porcellus</i> ADIP	-	-----	-
<i>Bos taurus</i> ADIP	-	-----	-
<i>Equus caballus</i> ADIP	-	-----	-
<i>Loxodonta africana</i> ADIP	-	-----	-
<i>Homo sapiens</i> ADIQ	-	-----	-
<i>Pan troglodytes</i> ADIQ	-	-----	-
<i>Pongo abelii</i> ADIQ	-	-----	-
<i>Nomascus leucogenys</i> ADIQ	-	-----	-
<i>Macaca mulatta</i> ADIQ	-	-----	-
<i>Mus musculus</i> Adiq	-	-----	-
<i>Rattus norvegicus</i> Adiq	-	-----	-
<i>Homo sapiens</i> ADIR	16	-----LPVHVYPL	23
<i>Pan troglodytes</i> ADIR	16	-----LPVHVYPL	23
<i>Pongo abelii</i> ADIR	16	-----LPVHVYPL	23
<i>Nomascus leucogenys</i> ADIR	16	-----LPVHVYPL	23
<i>Macaca mulatta</i> ADIR	16	-----LPVHVYPL	23
<i>Papio hamadryas</i> ADIR	16	-----LPVHVYPL	23
<i>Callithrix jacchus</i> ADIR	16	-----LPVHVYPL	23
<i>Tarsius syrichta</i> ADIR	16	-----LPVHVYPL	23
<i>Otolemur garnettii</i> ADIR	16	-----LPVHVYPL	23
<i>Tupaia belangeri</i> ADIR	16	-----LPVHVYPL	23
<i>Mus musculus</i> Adir	16	-----LPVHIYPL	23
<i>Rattus norvegicus</i> Adir	16	-----LPVHVYPL	23
<i>Cavia porcellus</i> ADIR	16	-----LPVHVYPL	23
<i>Oryctolagus cuniculus</i> ADIR	16	-----LPVHVYPL	23
<i>Tursiops truncatus</i> ADIR	16	-----LPVHVYPL	23
<i>Bos taurus</i> ADIR	16	-----LPVHVYPL	23
<i>Equus caballus</i> ADIR	16	-----LPVHVYPL	23
<i>Canis lupus familiaris</i> ADIR	16	-----LPVHVYPL	23
<i>Myotis lucifugus</i> ADIR	16	-----LPVHVYPL	23
<i>Pteropus vampyrus</i> ADIR	16	-----LPVHVYPL	23
<i>Erinaceus europaeus</i> ADIR	-	-----	-
<i>Dasyopus novemcinctus</i> ADIR	16	-----LPVHVYPL	23
<i>Choloepus hoffmanni</i> ADIR	16	-----LPVHVYPL	23
<i>Loxodonta africana</i> ADIR	16	-----LPVHVYPL	23

*Homo sapiens* ADIA 117 ---K---ATQKIAFSATRTINVP----L-RRDQT-IRFDHVIITN-MN-NNYEPRSGKF 160  
670 680 690 700 710 720  
*Homo sapiens* ADIA 117 ---K---ATQKIAFSATRTINVP----L-RRDQT-IRFDHVIITN-MN-NNYEPRSGKF 160  
*Papio hamadryas* ADIA 117 ---K---ATQKIAFSATRTINTP----L-RRDQT-IRFDHVIITN-MN-NNYEPRSGKF 160  
*Mus musculus* Adia 144 ---G---ATQKVAFSAALRTINSPL----L-RPNQV-IREKVIITN-AN-ENYEPRNGKF 187  
*Rattus norvegicus* Adia 115 ---K---ATQKVAFSAALRTVNSA----L-RPNQA-IREKVIITN-VN-DNYEPRSGKF 158  
*Cavia porcellus* ADIA 115 ---K---ATQKVAFSALKTLTSA----V-RAKQA-IRFDSVIITN-VN-KNYEPRSGKF 158  
*Ochotona princeps* ADIA 115 ---K---ATQKIVFSLKKTATP----V-RRDLP-VREHTIITN-EN-NNYESRSGKF 158  
*Bos taurus* ADIA 111 ---K---ATQKIAFSASRTINHH----Q-RQGQP-IRFDHVIITN-AN-ENYQARSSKF 154  
*Equus caballus* ADIA 116 ---K---TTQKIGFSATRTVNIP----L-RKDQV-IRFDHLIITN-VN-DNYQPRSGKF 159  
*Canis lupus familiaris* ADIA 114 ---K---ATQKIAFSAMRTINIP----L-RRDQT-IRFDHVIITN-EN-RNYEPRSGKF 157  
*Felis catus* ADIA 118 ---K---ATQKIAFCAKRTINSA----L-RRDQA-IRFDQVIITN-LN-NNYESRSGKF 161  
*Myotis lucifugus* ADIA 115 ---K---ATQKVAFSALRKINTP----L-RKDQV-IRFDHVIITN-VN-NNYESRSGKF 158  
*Dasyopus novemcinctus* ADIA 112 ---K---ATQKIAFSATRTVTPP----L-RRDQT-IRFDHVIITN-EN-NNYEPRSGKF 155  
*Loxodonta africana* ADIA 115 ---K---ATQKIAFSALRNINVP----L-RRDQA-IRFDHVIITN-EN-NNYEPRSGKF 158  
*Homo sapiens* ADIB 115 ---K---QKFQSVFTVTRQTHQP----P-APNSL-IRENAVLTN-PQ-GDYDTSTGKF 158  
*Pan troglodytes* ADIB 115 ---K---QKFQSVFTVARQTHQP----P-APNSL-IRENAVLTN-PQ-GDYDTSTGKF 158  
*Pongo abelii* ADIB 115 ---K---QKFQSVFTVTRQTHQP----P-APNSL-IRENAVLTN-PQ-GDYDTSTGKF 158  
*Nomascus leucogenys* ADIB 116 ---K---QKFQSVFTVTRQTHQP----P-APNSL-IRENAVLTN-PQ-GDYDTSTGKF 159  
*Callithrix jacchus* ADIB 114 ---K---QKYQSVFTVTRQTSQF----P-AANGL-IRENAVLTN-PQ-GDYDTSTGKF 157  
*Otolemur garnettii* ADIB 113 ---K---QKHQSVFTVTRQTAQY----P-EPNSL-VKENTVITN-PQ-GDYNTGTGKF 156  
*Mus musculus* Adib 146 ---K---QKHQSVFTVTRQTTQY----P-EANAL-VRENSVITN-PQ-GHYNPSTGKF 189  
*Rattus norvegicus* Adib 138 ---K---QKHQSVFTVTRQTAQY----P-AANGL-VKENSATITN-PQ-GDYNTGTGKF 181  
*Cavia porcellus* ADIB 162 ---K---QKHQSVFTVARQTEQH----P-TANGL-VRENAAITN-PQ-GDYDRDSGRF 205  
*Oryctolagus cuniculus* ADIB 168 ---K---QKHQSVFTVTRQTAQF----P-ESNSL-VRENTAITN-PQ-GDYDTSTGKF 211  
*Bos taurus* ADIB 113 ---K---QKHQSVFSTRQTVQF----P-EANSL-VKENTVITN-PQ-GHYDKDSGKF 156  
*Equus caballus* ADIB 133 ---K---QKHQSVFTVTRQTDQY----P-AANSL-VKENTVITN-PQ-GHYDTSTGKF 176  
*Canis lupus familiaris* ADIB 115 ---K---QKHQSVFTVTRQTAQY----P-LANGL-VKENTVITN-PQ-GHYDTSTGKF 158  
*Myotis lucifugus* ADIB 115 ---K---QKHQSVFTVTRQTAEH----P-TSNGL-VKENTVITN-PQ-GDYNTSTGKF 158  
*Loxodonta africana* ADIB 113 ---K---QKHQSVFTVTRQTVQY----P-EPNSL-VKENGVIITN-PQ-GHYDTSTGKF 156  
*Homo sapiens* ADIC 110 ---K---DQPRPAFSAIRRNPP----P-MGGNV-VIFDMVITN-QE-EPYQNHSGRF 151  
*Macaca mulatta* ADIC 110 ---K---DQPRPAFSAIRRNPP----P-MGGNV-VIFDMVITN-QE-EPYQNHSGRF 151  
*Papio hamadryas* ADIC 110 ---K---DQPRPAFSAIRRNPP----P-MGGNV-VIFDMVITN-QE-EPYQNHSGRF 151  
*Callithrix jacchus* ADIC 110 ---R---DQPRPAFSAIRRNPP----P-MGGNV-VIFDVLITN-QE-GPYQNHSGRF 151  
*Mus musculus* Adic 110 ---R---DQPRPAFSAIRRNPP----M-TLGNV-VIFDKVLTN-QE-SPYQNHSGRF 151  
*Rattus norvegicus* Adic 122 ---R---DQPRPAFSAIRRNPP----P-TYGNV-VIFDKVLTN-QE-NPYQNHSGRF 163  
*Cavia porcellus* ADIC 109 ---R---DQPRPAFSAVRNPNQ----P-KRDKV-VIFDTVITN-QE-GPYRNDTGHF 151  
*Oryctolagus cuniculus* ADIC 151 ---R---DQPRPAFSAVRNPNQ----P-SGGNV-VIFDTVITN-QE-EPYQNHSGRF 192  
*Equus caballus* ADIC 143 ---K---DQPRPAFSAVRRNA----P-LDSNM-VIFDEVIITN-QE-GSYDRSSTGHF 184  
*Canis lupus familiaris* ADIC 129 ---R---DQPRPAFSAIRRNPP----P-TGGNV-VIFDTVITN-QE-GPYQNHSGRF 170  
*Myotis lucifugus* ADIC 110 ---N---DQPRPAFSAVRNPNQ----P-TGGNV-VIFDTVITN-EE-GRYQSHSGRF 151  
*Loxodonta africana* ADIC 125 ---K---DQPRPAFSAVRNPNQ----P-MGGNV-VIFDVLITN-QE-GPYQNHSGRF 166  
*Homo sapiens* ADID 139 ---A---YVYRSAFVSGLE--TY----V-TIPNMPIRETKIFYN-QQ-NHYDGSTGKF 181  
*Pan troglodytes* ADID 139 ---A---YVYRSAFVSGLE--TY----I-TVPNMPIRETKIFYN-QQ-NHYDGSTGKF 181  
*Pongo abelii* ADID 108 ---A---YVYRSAFVSGLE--TY----V-TVPNMPIRETKIFYN-QQ-NHYDGSTGKF 150  
*Nomascus leucogenys* ADID 138 ---A---YVYRSAFVSGLE--TY----V-TVPNMPIRETKIFYN-QQ-NHYDGSTGKF 180  
*Macaca mulatta* ADID 137 ---A---YVYRSAFVSGLE--TY----V-TVPNMPIRETKIFYN-QQ-NHYDGSTGKF 179  
*Otolemur garnettii* ADID 108 ---A---YVYRSAFVSGLE--NR----V-TVPNVPIRETKIFYN-QQ-NHYDGSTGKF 150  
*Mus musculus* Adid 122 ---A---YVYRSAFVSGLE--TR----V-TVPNVPIRETKIFYN-QQ-NHYDGSTGKF 164  
*Rattus norvegicus* Adid 108 ---A---YVYRSAFVSGLE--TR----V-TVPNVPIRETKIFYN-QQ-NHYDGSTGKF 150  
*Cavia porcellus* ADID 150 ---A---FYVYRSAFVSGLE--AY----V-TVPNVPIRETKIFYN-QQ-NHYDGSTGKF 192  
*Oryctolagus cuniculus* ADID 118 ---A---YVYRSAFVSGLE--GR----V-TIPNVPIRETKIFYN-QQ-NHYDGSTGKF 160  
*Bos taurus* ADID 103 ---A---YVYRSAFVSGLE--RQ----V-TVPNVPIRETKIFYN-QQ-NHYDGSTGKF 145  
*Equus caballus* ADID 165 ---S---YVYRSAFVSGLE--TR----V-TVPNVPIRETKIFYN-QQ-NHYDGSTGKF 207  
*Canis lupus familiaris* ADID 117 ---A---YVYRSAFVSGLE--SR----I-TVPNVPIRETKIFYN-LQ-NHYDGSTGKF 159  
*Felis catus* ADID 108 ---A---YVYRSAFVSGLE--SR----V-TVPNVPIRETKIFYN-QQ-NHYDVTTGKF 150  
*Myotis lucifugus* ADID 117 ---A---YVYRSAFVSGLE--TR----V-TVPNVPIRETKIFYN-QQ-NHYDSTGKF 159  
*Dasyopus novemcinctus* ADID 107 ---A---YVYRSAFVSGLE--AR----V-TVPNVPIRETKIFYN-QQ-SHYDSTGKF 149  
*Loxodonta africana* ADID 108 ---A---YSYRSAFVSGLE--AR----V-TVPNVPIRETKIFYN-QQ-NHYDGSTGKF 150  
*Homo sapiens* ADIE 99 ---S---VPPRSAFSAKRSESRV----P-PPSDAPLPEFDRVLVN-EQ-GHYDAVTGKF 143  
*Pan troglodytes* ADIE 99 ---S---VPPRSAFSAKRSESRV----P-PPSDAPLPEFDRVLVN-EQ-GHYDAVTGKF 143  
*Pongo abelii* ADIE 99 ---S---VPPRSAFSAKRSESRV----P-PPSDAPLPEFDRVLVN-EQ-GHYDAVTGKF 143  
*Papio hamadryas* ADIE 99 ---S---VPPRSAFSAKRSESRV----P-PPSDAPLPEFDRVLVN-EQ-GHYDAVTGKF 143  
*Callithrix jacchus* ADIE 99 ---S---VPPRSAFSAKRSESRV----P-PPSDAPLPEFDRVLVN-EQ-GHYDAVTGKF 143  
*Otolemur garnettii* ADIE 99 ---S---VPPRSAFSAKRSESRV----P-PLSDAPLPEFDRVLVN-EQ-GHYDAATGKF 143  
*Mus musculus* Adie 99 ---S---VPPRSAFSAKRSESRV----P-PPADTPEFDRVLVN-EQ-GHYDPTTGKF 143  
*Rattus norvegicus* Adie 99 ---S---VPPRSAFSAKRSESRV----P-PPADTPEFDRVLVN-EQ-GHYDATGKF 143  
*Homo sapiens* ADIF1 197 ---L---VLPKSAFTVGLTVLSK----F-PSSDVPKFDKILYN-EF-NHYDTAAGKF 241  
*Homo sapiens* ADIF2 197 ---L---VLPKSAFTVGLTVLSK----F-PSSDVPKFDKILYN-EF-NHYDTAAGKF 241  
*Pan troglodytes* ADIF1 197 ---L---VLPKSAFTVGLTVLSK----F-PSSDVPKFDKILYN-EF-NHYDTAAGKF 241  
*Pongo abelii* ADIF1 197 ---L---VLPKSAFTVGLTVLSK----F-PSSDVPKFDKILYN-EF-NHYDTAAGKF 241  
*Nomascus leucogenys* ADIF1 197 ---L---VLPKSAFTVGLTVLSK----F-PSSDVPKFDKILYN-EF-NHYDTAAGKF 241  
*Macaca mulatta* ADIF1 197 ---L---VLPKSAFTVGLTVLSK----F-PSSDVPKFDKILYN-EF-NHYDTAAGKF 241  
*Papio hamadryas* ADIF1 197 ---L---VLPKSAFTVGLTVLSK----F-PSSDVPKFDKILYN-EF-NHYDTAAGKF 241

<i>Microcebus murinus</i> ADIF1	197	----	P---	ALPKSAFTVGLTVLSK----	F-PSSDVP	IKFDKILYN-EF-NHYDVATGKF	241
<i>Otolemur garnettii</i> ADIF1	197	----	P---	VLPKSAFTVGLTVLSK----	F-PSSDVP	IKFDKILYN-DF-NHYDIAGKGF	241
<i>Mus musculus</i> Adif1	226	----	P---	LVPKSAFTVGLTVISK----	F-PPDPAP	IKFDKILYN-EL-NHYNVATGKF	270
<i>Rattus norvegicus</i> Adif1	213	----	P---	MVPKSAFTVGLTVISK----	F-PPDPVP	IKFDKILYN-EQ-NHYNVATGKF	257
<i>Cavia porcellus</i> ADIF1	197	----	P---	VLPKSAFTVGLTVLNK----	F-PASDAP	IKFDKILYN-EF-NHYDVATGKF	241
<i>Oryctolagus cuniculus</i> ADIF1	197	----	P---	VLPKSAFTVGLTVLSK----	F-PASDVP	IKFDKILYN-EL-NHYNVATGKF	241
<i>Ochotona princeps</i> ADIF1	197	----	P---	VTPKSAFTVGLTVLSK----	F-PDADVP	IKFDKILYN-DL-NHYNVATGKF	241
<i>Bos taurus</i> ADIF1	197	----	P---	VLPKSAFTVGLTVLSK----	F-PSSDTP	IKFDKILYN-EF-HHYNVATGKF	241
<i>Equus caballus</i> ADIF1	197	----	P---	VLPKSAFTVGLTVLSK----	F-PSSDVP	IKFDKILYN-EF-NHFDIATGKF	241
<i>Canis lupus familiaris</i> ADIF1	197	----	P---	VLPKSAFTVGLTVLSK----	F-PTSDVP	IKFDKILYN-EF-NHYDVATGKF	241
<i>Felis catus</i> ADIF1	197	----	P---	VLPKSAFTVGLTVLSK----	F-PASDAP	IKFDKILYN-EF-NHYDVATGKF	241
<i>Dasyopus novemcinctus</i> ADIF1	198	----	P---	VPPKSAFTVGLTVLSK----	F-PSSDVP	IKFDKILYN-EF-NHFDIATGKF	242
<i>Loxodonta africana</i> ADIF1	197	----	P---	VLPKSAFTVGLTVLSK----	F-PSSDLP	IKFDKILYN-EF-HHYNVATGKF	241
<i>Homo sapiens</i> ADIG	194	----	RCGSIVLKS	AFSVGIT-TS-----	Y-PEERLPI	IFNKVLEN-EG-EHYNPATGKF	239
<i>Pan troglodytes</i> ADIG	194	----	RCGSIVLKS	AFSVGIT-TS-----	Y-PEERLPI	IFNKVLEN-EG-EHYNPATGKF	239
<i>Pongo abelii</i> ADIG	194	----	RCGSIVLKS	AFSVGIT-TS-----	Y-PEERLPI	IFNKVLEN-EG-EHYNPATGKF	239
<i>Callithrix jacchus</i> ADIG	180	----	RCGSIVLKS	AFSVGIT-TS-----	Y-PEERLPI	IFNKVLEN-EG-EHYNPATGKF	225
<i>Otolemur garnettii</i> ADIG	140	----	RCGSIVLKS	AFSVGIT-TS-----	Y-PEERLPI	IFNKVLEN-EG-EHYNPATGKF	185
<i>Mus musculus</i> Adig	182	----	RCGSIVLKS	AFSVGIT-TS-----	Y-PEERLPI	IFNKVLEN-EG-EHYNPATGKF	227
<i>Rattus norvegicus</i> Adig	183	----	RCGSIVLKS	AFSVGIT-TS-----	Y-PEERLPI	IFNKVLEN-EG-EHYNPATGKF	228
<i>Cavia porcellus</i> ADIG	140	----	RCGSIVLKS	AFSVGIT-TS-----	Y-PEERLPI	IFNKVLEN-EG-EHYNPATGKF	185
<i>Oryctolagus cuniculus</i> ADIG	140	----	RCGSIVLKS	AFSVGIT-TS-----	Y-PEERLPI	IFNKVLEN-EG-EHYNPATGKF	185
<i>Tursiops truncatus</i> ADIG	192	----	RCGSIVLKS	AFSVGIT-TS-----	Y-PEERLPI	IFNKVLEN-EG-EHYNPATGKF	237
<i>Bos taurus</i> ADIG	140	----	RCGSIVLKS	AFSVGIT-TS-----	Y-PEERLPI	IFNKVLEN-EG-EHYNPATGKF	185
<i>Equus caballus</i> ADIG	181	----	KCGSIVLKS	AFSVGIT-TS-----	Y-PEERLPI	IFNKVLEN-EG-EHYNPATGKF	226
<i>Canis lupus familiaris</i> ADIG	181	----	RCGSIMLKS	AFSVGIT-TS-----	Y-PEERLPI	IFNKVLEN-EG-EHYNPATGKF	226
<i>Myotis lucifugus</i> ADIG	140	----	RCGSIVLKS	AFSVGIT-TS-----	Y-PEERLPI	IFNKVLEN-EG-EHYNPATGKF	185
<i>Homo sapiens</i> ADIH	142	----	SCGSGHTKS	AFSVAVT-KS-----	Y-PRERLPI	IKFDKILMN-EG-GHYNASSGKF	187
<i>Pan troglodytes</i> ADIH	142	----	SCGSGHTKS	AFSVAVT-KS-----	Y-PRERLPI	IKFDKILMN-EG-GHYNASSGKF	187
<i>Pongo abelii</i> ADIH	142	----	SCGSGHTKS	AFSVAVT-KS-----	Y-PRERLPI	IKFDKILMN-EG-GHYNASSGKF	187
<i>Nomascus leucogenys</i> ADIH	142	----	SCGSGHTKS	AFSVAVT-KS-----	Y-PRERLPI	IKFDKILMN-EG-GHYNASSGKF	187
<i>Macaca mulatta</i> ADIH	142	----	SCGSGHTKS	AFSVAVT-KS-----	Y-PRERLPI	IKFDKILMN-EG-GHYNASSGKF	187
<i>Papio hamadryas</i> ADIH	142	----	SCGSGHTKS	AFSVAVT-KS-----	Y-PRERLPI	IKFDKILMN-EG-GHYNASSGKF	187
<i>Mus musculus</i> Adih	149	----	SCGSSRAKS	AFSVAVT-KS-----	Y-PRERLPI	IKFDKILMN-EG-GHYNASSGKF	194
<i>Rattus norvegicus</i> Adih	186	----	SCGSSRAKS	AFSVAVT-KS-----	Y-PRERLPI	IKFDKILMN-EG-GHYNASSGKF	231
<i>Dipodomys ordii</i> ADIH	142	----	SCGSGRAKS	AFSVAVT-KS-----	Y-PRERLPI	IKFDKILMN-EG-GHYNASSGKF	187
<i>Cavia porcellus</i> ADIH	142	----	SCGSGRPKS	AFSVAVT-KS-----	Y-PRERLPI	IKFDKILMN-EG-GHYNASSGKF	187
<i>Bos taurus</i> ADIH	159	----	SCGSSHAKS	AFSVAVT-KS-----	Y-PRERLPI	IKFDKILMN-EG-GHYNASSGKF	204
<i>Equus caballus</i> ADIH	142	----	SCGSGRAKS	AFSVAVT-KS-----	Y-PRERLPI	IKFDKILMN-EG-GHYNASSGKF	187
<i>Canis lupus familiaris</i> ADIH	142	----	SCGSGHAKS	AFSVAVT-KS-----	Y-PRERLPI	IKFDKILMN-EG-GHYNASSGKF	187
<i>Pteropus vampyrus</i> ADIH	142	----	SCSSGHAKS	AFSVAVT-KS-----	Y-PRERLPI	IKFDKILMN-EG-SHYNASSGKF	187
<i>Loxodonta africana</i> ADIH	142	----	SCGSARAKS	AFSVAVT-KS-----	Y-PRERLPI	IKFDKILMN-EG-GHYNASSGKF	187
<i>Homo sapiens</i> ADII	152	AT-FS----	GPKIAFYVGLKSP-H--E----	GYEV-LKF	DDVVTNL-G-NHYDPTTGKF	195	
<i>Pongo abelii</i> ADII	152	AT-FS----	GPKIAFYVGLKSP-H--E----	GYEV-LKF	DDVVTNL-G-NHYDPTTGKF	195	
<i>Macaca mulatta</i> ADII	152	AT-FS----	GPKIAFYVGLKSP-H--E----	GYEV-LKF	DDVVTNL-G-NHYDPTTGKF	195	
<i>Mus musculus</i> Adii	152	AA-FS----	GPKIAFYVGLKSP-H--E----	GYEV-LKF	DDVVTNL-G-NHYDPTTGKF	195	
<i>Rattus norvegicus</i> Adii	152	AA-FS----	GPKIAFYVGLKSP-H--E----	GYEV-LKF	DDVVTNL-G-NHYDPTTGKF	195	
<i>Bos taurus</i> ADII	152	AA-FS----	GPKIAFYVGLKSP-H--E----	GYEV-LKF	DDVVTNL-G-NHYDPTTGKF	195	
<i>Canis lupus familiaris</i> ADII	152	AA-FS----	GPKIAFYVGLKSP-H--E----	GYEV-LKF	DDVVTNL-G-NHYDPTTGKF	195	
<i>Dasyopus novemcinctus</i> ADII	152	AA-FS----	GPKIAFYVGLKSP-H--E----	GYEV-LKF	DDVVTNL-G-NHYDPTTGKF	195	
<i>Homo sapiens</i> ADIJ	118	AATYS---	TVPKIAFYAGLKRQ-H--E----	GYEV-LKF	DDVVTNL-G-NHYDPTTGKF	163	
<i>Pan troglodytes</i> ADIJ	118	AATYS---	TVPKIAFYAGLKRQ-H--E----	GYEV-LKF	DDVVTNL-G-NHYDPTTGKF	163	
<i>Papio hamadryas</i> ADIJ	118	AATYS---	TVPKIAFYAGLKRQ-H--E----	GYEV-LKF	DDVVTNL-G-NHYDPTTGKF	163	
<i>Mus musculus</i> Adij	118	AATYS---	TVPKIAFYAGLKRQ-H--E----	GYEV-LKF	DDVVTNL-G-NHYDPTTGKF	163	
<i>Rattus norvegicus</i> Adij	118	AATYS---	TVPKIAFYAGLKRQ-H--E----	GYEV-LKF	DDVVTNL-G-NHYDPTTGKF	163	
<i>Oryctolagus cuniculus</i> ADIJ	118	AATYS---	TVPKIAFYAGLKRQ-H--E----	GYEV-LKF	DDVVTNL-G-NHYDPTTGKF	163	
<i>Bos taurus</i> ADIJ	118	AATYS---	TVPKIAFYAGLKRQ-H--E----	GYEV-LKF	DDVVTNL-G-NHYDPTTGKF	163	
<i>Canis lupus familiaris</i> ADIJ	118	AATYS---	TVPKIAFYAGLKRQ-H--E----	GYEV-LKF	DDVVTNL-G-NHYDPTTGKF	163	
<i>Loxodonta africana</i> ADIJ	118	AATYS---	TVPKIAFYAGLKRQ-H--E----	GYEV-LKF	DDVVTNL-G-NHYDPTTGKF	163	
<i>Homo sapiens</i> ADIK	103	AAGY----	VPRIAFYAGLRRP-H--E----	GYEV-LRF	DDVVTNV-G-NAYEAASGKF	146	
<i>Pan troglodytes</i> ADIK	103	AAGY----	VPRIAFYAGLRRP-H--E----	GYEV-LRF	DDVVTNV-G-NAYEAASGKF	146	
<i>Gorilla gorilla</i> ADIK	103	AARY----	VPRIAFYAGLRRP-H--E----	GYEV-LRF	DDVVTNV-G-NAYEAASGKF	146	
<i>Papio hamadryas</i> ADIK	103	AAGY----	VPRIAFYAGLRRP-H--E----	GYEV-LRF	DDVVTNV-G-NAYEAASGKF	146	
<i>Callithrix jacchus</i> ADIK	103	PAGY----	VPRIAFYAGLRRP-H--E----	GYEV-LRF	DDVVTNV-G-NAYEAASGKF	146	
<i>Rattus norvegicus</i> Adik	103	PAGY----	VPRIAFYAGLRRP-H--E----	GYEV-LRF	DDVVTNV-G-NAYEAASGKF	146	
<i>Cavia porcellus</i> ADIK	103	PAGY----	VPRIAFYAGLRRP-H--E----	GYEV-LRF	DDVVTNV-G-NAYEAASGKF	146	
<i>Equus caballus</i> ADIK	103	PAGY----	VPRIAFYAGLRRP-H--E----	GYEV-LRF	DDVVTNV-G-NAYEAASGKF	146	
<i>Canis lupus familiaris</i> ADIK	103	PAGY----	VPRIAFYAGLRRP-H--E----	GYEV-LRF	DDVVTNV-G-NAYEAASGKF	146	
<i>Dasyopus novemcinctus</i> ADIK	103	PAGY----	MPRIAFYAGLRRP-H--E----	GYEV-LRF	DDVVTNV-G-NAYEAASGKF	146	
<i>Loxodonta africana</i> ADIK	103	PAGY----	VPRIAFYAGLRRP-H--E----	GYEV-LRF	DDVVTNV-G-NAYEAASGKF	146	
<i>Mus musculus</i> Adil	121	TATYT---	TVPRVAFYAGLKNP-H--E----	GYEV-LKF	DDVVTNL-G-NNYDAASGKF	166	
<i>Rattus norvegicus</i> Adil	121	TATYT---	TVPRVAFYAGLKNP-H--E----	GYEV-LKF	DDVVTNL-G-NNYDAASGKF	166	
<i>Homo sapiens</i> ADIM	225	-----	PELQIAFEMASLAT--HFSN----	QNSG-IF	IFSSVETNI-G-NFFDVMTGKF	266	
<i>Pan troglodytes</i> ADIM	225	-----	PELQIAFEMASLAT--HFSN----	QNSG-IF	IFSSVETNI-G-NFFDVMTGKF	266	

<i>Pongo abelii</i> ADIM	181	-----PELQIAFMASLAT--HFSN-----QNSG-IIFSSVETNI-G-NFFDVMTCGRF	222
<i>Nomascus leucogenys</i> ADIM	225	-----PELQIAFMASLAT--HFSN-----QNSG-IIFSSVETNI-G-NFFDVMTCGRF	266
<i>Papio hamadryas</i> ADIM	225	-----PELQIAFMASLAT--HFSN-----QNSG-IIFSSVETNI-G-NFFDVMTCGRF	266
<i>Callithrix jacchus</i> ADIM	215	-----PELQIAFMASLAT--HFSN-----QNSG-IIFSSVETNI-G-NFFDVMTCGRF	256
<i>Mus musculus</i> Adim	114	-----PELQIAFMASLAT--HFSN-----QNSG-IIFSSVETNI-G-NFFDVMTCGRF	155
<i>Rattus norvegicus</i> Adim	188	-----PELQIAFMASLAT--HFSN-----QNSG-IIFSSVETNI-G-NFFDVMTCGRF	229
<i>Cavia porcellus</i> ADIM	181	-----PELQIAFMASLAT--HFTN-----QNSG-IIFSSVETNI-G-NFFDVMTCGRF	222
<i>Bos taurus</i> ADIM	114	-----PELQIAFMASLAT--HFTN-----QNSG-IIFSSVETNI-G-NFFDVMTCGRF	155
<i>Equus caballus</i> ADIM	114	-----PELQIAFMASLAT--HFTN-----QNSG-IIFSSVETNI-G-NFFDVMTCGRF	155
<i>Canis lupus familiaris</i> ADIM	175	-----PELQIAFMASLAT--HFSN-----QNSG-IIFSSVETNI-G-NFFDVMTCGRF	216
<i>Homo sapiens</i> ADIN	172	P-----PEPRSAFSAARTRSLVGS DAGPGRHQ-PLAFDTEFVNIGG--DFDAAAAGVF	221
<i>Pan troglodytes</i> ADIN	172	P-----PEPRSAFSAARTRSLVGS DAGPGRHR-PLAFDTEFVNIGG--DFDAAAAGVF	221
<i>Pongo abelii</i> ADIN	172	P-----PEPRSAFSAARTRSLVGS DAGPGRHR-PLAFDTEFVNIGG--DFDAAAAGVF	221
<i>Nomascus leucogenys</i> ADIN	167	P-----PEPRSAFSAARTRSLVGS DAGPGRHR-PLAFDTEFVNIGG--DFDAAAAGVF	216
<i>Macaca mulatta</i> ADIN	174	P-----PEPRSAFSAARTRSLVGS DAGSGRHR-PLSEFDELVNIGG--DFDAAAAGVF	223
<i>Callithrix jacchus</i> ADIN	172	P-----PEPRSAFSAARTHSLVGS DASPGRHR-PLAFDDELVNIGG--DFDAAAAGVF	221
<i>Mus musculus</i> Adin	170	A-----PEPRSAFSAARTRSLVGS DAAPGRHR-PLAFDDELVNIGG--DFDAAAAGVF	219
<i>Cavia porcellus</i> ADIN	182	P-----SQPRSAFSAARTRSLVGS DAGPGRHR-PLAFDDELVNIGG--DFDAAAAGVF	231
<i>Tursiops truncatus</i> ADIN	168	P-----PEPRSAFSAARTRSLVGS DAGPGRHR-PLAFDDELVNIGG--DFDAAAAGVF	217
<i>Canis lupus familiaris</i> ADIN	168	P-----PEPRSAFSAARTRSLVGS DAGPGRHR-PLAFDDELVNIGG--DFDAAAAGVF	217
<i>Dasyops novemcinctus</i> ADIN	168	P-----PEPRSAFSAARTRSLVGS DAGPGRHR-PLAFDDELVNIGG--DFDAAAAGVF	217
<i>Loxodonta africana</i> ADIN	168	P-----PEPRSAFSAARTRSLVGS DSGPGRHR-PLAFDDELVNIGG--DFDAAAAGVF	217
<i>Homo sapiens</i> ADIO	112	----C--RRAYAAFSVGRREGLHSSD-----HFQA-VEFDTELVLNLDG--AFDLAAGRF	156
<i>Pan troglodytes</i> ADIO	112	----C--QRAYAAFSVGRREGLHSSD-----HFQA-VEFDTELVLNLDG--AFDLAAGRF	156
<i>Macaca mulatta</i> ADIO	107	----C--QRAYAAFSVGRREGLHSSD-----DFQA-VEFDTELVLNLDG--AFDLAAGRF	151
<i>Bos taurus</i> ADIO	111	----C--PRAYAAFSVGRREGLHSAD-----ALQA-VTFDELVLNLDG--AFDLASGRF	155
<i>Myotis lucifugus</i> ADIO	111	----C--QRAYAAFSVGRREGLHSTD-----AFQA-VEFDTELVLNLDG--AFDLASGRF	155
<i>Homo sapiens</i> ADIP	239	----C--KSHYAAFSVGRKKPMSNH-----YYQT-VIEFDELVNLYD--HFNMFYTKGF	283
<i>Otolemur garnettii</i> ADIP	141	----C--KNHYAAFSVGRKKPLHSND-----YYQT-VVEFDELVNLYG--HFNMFYTKGF	185
<i>Mus musculus</i> Adip	141	----C--KSQYAAFSVGRKKALHSND-----YFQP-VVEFDELVNLYK--HFNMFYTKGF	185
<i>Cavia porcellus</i> ADIP	141	----C--KNYAAFSVGRKKPLHSND-----YYQT-VVEFDELVNLYG--HFNMFYTKGF	185
<i>Bos taurus</i> ADIP	164	----C--KNHYAAFSVGRKKPLHSND-----YYQT-VIEFDELVNLYS--HFNMFYTKGF	208
<i>Equus caballus</i> ADIP	139	----C--KNHYAAFSVGRKKPLHSND-----YYQT-VIEFDELVNLYD--HFNMFYTKGF	183
<i>Loxodonta africana</i> ADIP	193	----C--KNHYAAFSVGRKKPLHSND-----YYQT-VVEFDELVNLYG--HFNMFYTKGF	237
<i>Homo sapiens</i> ADIQ	139	----C--QKRFFAFSVGRKKTALHSGE-----DFQT-LLEFERVFNLDGCG--FDMATGQF	183
<i>Pan troglodytes</i> ADIQ	139	----C--QKRFFAFSVGRKKTALHSGE-----DFQT-LLEFERVFNLDGCG--FDMATGQF	183
<i>Pongo abelii</i> ADIQ	139	----C--QKRFFAFSVGRKKTALHSGD-----DFQT-LLEFERVFNLDGCG--FDMATGQF	183
<i>Nomascus leucogenys</i> ADIQ	139	----C--QKRFFAFSVGRKKTALHSGE-----DFQT-LLEFERVFNLDGCG--FDMVYTKGF	183
<i>Macaca mulatta</i> ADIQ	139	----C--QKRFFAFSVGRKKTALHSGE-----DFQR-LLEFERVFNLDGCG--FDMAAGHF	183
<i>Mus musculus</i> Adiq	125	----C--QTHYSAFSVGRKKTGLHSSE-----NFLS-LLEFDRVFNVDGHH--FDMATGSE	169
<i>Rattus norvegicus</i> Adiq	124	----C--QTHYSAFSVGRKKTGLHSSE-----NFLS-LLEFDRVFNVDGHH--FDMATGSE	168
<i>Homo sapiens</i> ADIR	24	P-----QQMRVAFSAARTSNL-----A-PGTLDQ-PIVEDLLLNNLGE--TFDLQLGRF	68
<i>Pan troglodytes</i> ADIR	24	P-----QQMRVAFSAARTSNL-----A-PGTLDQ-PIVEDLLLNNLGE--TFDLQLGRF	68
<i>Pongo abelii</i> ADIR	24	P-----QQMRVAFSAARTSNL-----A-PGTLDQ-PIVEDLLLNNLGE--TFDLQLGRF	68
<i>Nomascus leucogenys</i> ADIR	24	P-----QQMRVAFSAARTSNL-----A-PGTLDQ-PIVEDLLLNNLGE--TFDLQLGRF	68
<i>Macaca mulatta</i> ADIR	24	P-----QQMRVAFSAARTSNL-----A-PGTLDQ-PIVEDLLLNNLGE--TFDLQLGRF	68
<i>Papio hamadryas</i> ADIR	24	P-----QQMRVAFSAARTSNL-----A-PGTLDQ-PIVEDLLLNNLGE--TFDLQLGRF	68
<i>Callithrix jacchus</i> ADIR	24	P-----QQMRVAFSAARTSNL-----A-PGTLDQ-PIVEDLLLNNLGE--TFDLQLGRF	68
<i>Tarsius syrichta</i> ADIR	24	P-----QQMRVAFSAARTSNL-----A-PGTLDQ-PIVEDLLLNNLGE--TFDLQLGRF	68
<i>Otolemur garnettii</i> ADIR	24	P-----QQMRVAFSAARTSNL-----A-PGTLDQ-PIVEDLLLNNLGE--TFDLQLGRF	68
<i>Tupaia belangeri</i> ADIR	24	P-----QQMRVAFSAARTSNL-----A-PGTLDQ-PIVEDLLLNNLGE--TFDLQLGRF	68
<i>Mus musculus</i> Adir	24	P-----QQMRVAFSAARTSNL-----A-PGTLDQ-PIVEDLLLNNLGE--TFDLQLGRF	68
<i>Rattus norvegicus</i> Adir	24	P-----QQMRVAFSAARTSNL-----A-PGTLDQ-PIVEDLLLNNLGE--TFDLQLGRF	68
<i>Cavia porcellus</i> ADIR	24	P-----QQMRVAFSAARTSNL-----A-PGTLDQ-PIVEDLLLNNLGE--TFDLQLGRF	68
<i>Oryctolagus cuniculus</i> ADIR	24	P-----QQMRVAFSAARTSNL-----A-PGTLDQ-PIVEDLLLNNLGE--TFDLQLGRF	68
<i>Tursiops truncatus</i> ADIR	24	P-----QQMRVAFSAARTSNL-----A-PGTLDQ-PIVEDLLLNNLGE--TFDLQLGRF	68
<i>Bos taurus</i> ADIR	24	P-----QQMRVAFSAARTSNL-----A-PGTLDQ-PIVEDLLLNNLGE--TFDLQLGRF	68
<i>Equus caballus</i> ADIR	24	P-----QQMRVAFSAARTSNL-----A-PGTLDQ-PIVEDLLLNNLGE--TFDLQLGRF	68
<i>Canis lupus familiaris</i> ADIR	24	P-----QQMRVAFSAARTSNL-----A-PGTLDQ-PIVEDLLLNNLGE--TFDLQLGRF	68
<i>Myotis lucifugus</i> ADIR	24	P-----QQMRVAFSAARTSNL-----A-PGTLDQ-PIVEDLLLNNLGE--TFDLQLGRF	68
<i>Pteropus vampyrus</i> ADIR	24	P-----QQMRVAFSAARTSNL-----A-PGTLDQ-PIVEDLLLNNLGE--TFDLQLGRF	68
<i>Erinaceus europaeus</i> ADIR	1	P-----MRVAFSAARTSNL-----T-PGTLDQ-PIVEDLLINNLGE--TFDLQLGRF	42
<i>Dasyops novemcinctus</i> ADIR	24	P-----QQMRVAFSAARTSNL-----A-PGTLDQ-PIVEDLLLNNLGE--TFDLQLGRF	68
<i>Choloepus hoffmanni</i> ADIR	24	P-----QQMRVAFSAARTSNL-----A-PGTLDQ-PIVEDLLLNNLGE--TFDLQLGRF	68
<i>Loxodonta africana</i> ADIR	24	P-----QQMRVAFSAARTSNL-----A-PGTLDQ-PIVEDLLLNNLGE--TFDLQLGRF	68

<i>Homo sapiens</i> ADIA	161	-TCKVPGLYFETYH-----AS--SRGNLCVNLMRG--RERAQKVVTF--DYAY---	202
		730                  740                  750                  760                  770                  780	
<i>Homo sapiens</i> ADIA	161	-TCKVPGLYFETYH-----AS--SRGNLCVNLMRG--RERAQKVVTF--DYAY---	202
<i>Papio hamadryas</i> ADIA	161	-TCKVPGLYFETYH-----AS--SRGNLCVNLMRG--RERPQKVVTF--DYAY---	202
<i>Mus musculus</i> Adia	188	-TCKVPGLYFETYH-----AS--SRGNLCVNLVRGRDRDSMQKVVTF--DYAQ---	231
<i>Rattus norvegicus</i> Adia	159	-TCKVPGLYFETYH-----AS--SRGNLCVNLVRGRDRDRMQKVLTF--DYAQ---	202
<i>Cavia porcellus</i> ADIA	159	-TCKVPGLYFETYH-----AS--SRGNLCVNLVLRG--REHLKVVTF--DYVR---	200
<i>Ochotona princeps</i> ADIA	159	-TCKVPGLYFETYH-----AS--SRGNLCVNLVLRG--REKPKVLTFC--DYSI---	200
<i>Bos taurus</i> ADIA	155	-TCKVPGLYFETYH-----AS--SRGQLCVDLMRG--RAEPQKVVTF--DYVQ---	196
<i>Equus caballus</i> ADIA	160	-TCKVPGLYFAYH-----AS--SRGNLCVNLMRG--RERIQKVVTF--DFVH---	201
<i>Canis lupus familiaris</i> ADIA	158	-TCKVPGLYFAYH-----AS--SRGNLCVNLVVRG--RERMQKVVTF--DYVQ---	199
<i>Felis catus</i> ADIA	162	-TCKVPGLYFETYH-----AS--SRGNLCVNLMRG--REQMQKVVTF--DYVH---	203
<i>Myotis lucifugus</i> ADIA	159	-TCKVPGLYFETYH-----AS--SRGNLCVNLVLRG--LERMEKVVTF--DYVQ---	200
<i>Dasyopus novemcinctus</i> ADIA	156	-TCKVPGLYFETFH-----AS--SRGNLCVNLVLRG--RERPQRVVAFC--DFVH---	197
<i>Loxodonta africana</i> ADIA	159	-TCKVPGLYFETYH-----AS--SRGNLCVNLVVRG--RERVQKVVTF--DYVQ---	200
<i>Homo sapiens</i> ADIB	159	-TCKVPGLYFVYH-----AS--HTANLCVLLYR-----SGVKVVTF--GHTS---	197
<i>Pan troglodytes</i> ADIB	159	-TCKVPGLYFVYH-----AS--HTANLCVLLYR-----SGVKVVTF--GHTS---	197
<i>Pongo abelii</i> ADIB	159	-TCKVPGLYFVYH-----AS--HTANLCVLLYR-----SGVKVVTF--GHTS---	197
<i>Nomascus leucogenys</i> ADIB	160	-TCKVPGLYFVYH-----AS--HTANLCVLLYR-----SGVKVVTF--GHTS---	198
<i>Callithrix jacchus</i> ADIB	158	-TCKVPGLYFVYH-----TS--QTANLCVLLYR-----NGVKVVTF--DHMS---	196
<i>Otolemur garnettii</i> ADIB	157	-TCKVPGLYFVYH-----TS--QTANLCVHLYR-----NNVRVTF--DHMS---	195
<i>Mus musculus</i> Adib	190	-TCKVPGLYFVYH-----TS--HTANLCVHLLN-----NLARVASFC--DHMF---	228
<i>Rattus norvegicus</i> Adib	182	-TCKVPGLYFVHH-----TS--QTANLCVQLLL-----NNAKVTSFC--DHMS---	220
<i>Cavia porcellus</i> ADIB	206	-TCKVPGLYFVIYH-----TS--LTENLCVQLYH-----DNVKVTF--EHLVQGN	247
<i>Oryctolagus cuniculus</i> ADIB	212	-TCKVPGLYFVHH-----TS--HTANLCVQLYH-----NGARVTAFC--DHMA---	250
<i>Bos taurus</i> ADIB	157	-TCKVPGLYFVYH-----TS--HTSNLCVLLYR-----SGFKVATFC--DHMT---	195
<i>Equus caballus</i> ADIB	177	-TCKVPGLYFAHH-----TS--QTANLCVQLYR-----NGAKVTAFC--DHMS---	215
<i>Canis lupus familiaris</i> ADIB	159	-TCKVPGLYFVYH-----TS--LTSNLCVHLYR-----SGTRVTF--DHMS---	197
<i>Myotis lucifugus</i> ADIB	159	-TCKVPGLYFVHH-----TS--QTANLCVQLYR-----NEIQMTSFC--DHMS---	197
<i>Loxodonta africana</i> ADIB	157	-TCKVPGLYFVYH-----TS--QTANLCVQLYR-----SGVKVTF--DHMS---	195
<i>Homo sapiens</i> ADIC	152	-VCTVPGYIYFTFQ-----VL--SQWEICLSIVSSS--RGQVRRSLGFC--DTTN---	194
<i>Macaca mulatta</i> ADIC	152	-VCTVPGYIYFTFQ-----VV--SEREICLSIVSSS--RGQVRRSLGFC--DTTN---	194
<i>Papio hamadryas</i> ADIC	152	-VCTVPGYIYFTFQ-----VV--SEREICLSIVSSS--RGQVRRSLGFC--DTTN---	194
<i>Callithrix jacchus</i> ADIC	152	-VCAVPGYIYFTFQ-----VV--SKWDICLFIASSS--RGQVRRSLGFC--DANS---	194
<i>Mus musculus</i> Adic	152	-ICAVPGFYIYFNFQ-----VI--SKWDLCLFIKSSS--GGQPRDSLFS--NTNN---	194
<i>Rattus norvegicus</i> Adic	164	-ICAVPGFYIYFTFQ-----VI--SKWDLCLSISSS--RGQPRNSLGFC--DTNS---	206
<i>Cavia porcellus</i> ADIC	152	-VCAVPGFYIYFSFY-----VV--ATGSICLTISSS--QGQLRHSPGFC--DTNN---	194
<i>Oryctolagus cuniculus</i> ADIC	193	-VCAVPGFYIYFTFQ-----VV--SKWDLCLFIVSAS--RGQTRRSVGF--DTNS---	235
<i>Equus caballus</i> ADIC	185	-VCSVPGYIYFTFQ-----VV--SKWDVCLSISSS--RDQVRHSLGFC--DTNS---	227
<i>Canis lupus familiaris</i> ADIC	171	-ICAVPGYIYFTFQ-----VV--SKWDICLSIVSSG--RAQIRRSLGFC--DTNS---	213
<i>Myotis lucifugus</i> ADIC	152	-VCAVPGYIYFTFQ-----VV--SKWDICLSIMSSR--RGLTQRSVGF--DANS---	194
<i>Loxodonta africana</i> ADIC	167	-VCAVPGYIYFTFQ-----VV--SKRDICLSIVSSG--RNHPRRSLGFC--DTNS---	209
<i>Homo sapiens</i> ADID	182	-HCNIPGLYFAYH-----ITVYMKDVK--VSLFK---KDK--AMLFTY--DQYQE--	222
<i>Pan troglodytes</i> ADID	182	-HCNIPGLYFAYH-----ITVYMKDVK--VSLFK---KDK--AMLFTY--DQYQE--	222
<i>Pongo abelii</i> ADID	151	-HCNIPGLYFAYH-----ITVYMKDVK--VSLFK---KDK--AMLFTY--DQYQE--	191
<i>Nomascus leucogenys</i> ADID	181	-HCNIPGLYFAYH-----ITVYMKDVK--VSLFK---KDK--AMLFTY--DQYQE--	221
<i>Macaca mulatta</i> ADID	180	-HCNIPGLYFAYH-----ITVYMKDVK--VSLFK---KDK--AMLFTY--DQYQE--	220
<i>Otolemur garnettii</i> ADID	151	-LONIPGLYFSYH-----ITVYMKDVK--VSLFK---KDK--AVIVTY--DQYQD--	191
<i>Mus musculus</i> Adid	165	-YCNIPGLYFSYH-----ITVYMKDVK--VSLFK---KDK--AVLFTY--DQYQE--	205
<i>Rattus norvegicus</i> Adid	151	-HCNIPGLYFSYH-----ITVYMKDVK--VSLFK---KDK--AVLFTY--DQYQE--	191
<i>Cavia porcellus</i> ADID	193	-HCNIPGLYFSYH-----VTYLLKDVK--VSLFR---NDK--AELFTY--DQYQD--	233
<i>Oryctolagus cuniculus</i> ADID	161	-RCNIPGLYFSYH-----ITVYMKDVK--VSLFK---KDK--AMLFTY--DQYQD--	201
<i>Bos taurus</i> ADID	146	-LONIPGLYFSYH-----ITVYLLKDVK--VSLYK---NDK--ALLFTH--DQYQD--	186
<i>Equus caballus</i> ADID	208	-HCNIPGLYFSYH-----ITVYLLKDVK--VSLYK---KDK--AVLFTY--DQYQD--	248
<i>Canis lupus familiaris</i> ADID	160	-HCNIPGLYFSYH-----ITVYLLKDVK--VSLYK---KDK--AMLFTY--DQYQE--	200
<i>Felis catus</i> ADID	151	-HCNIPGLYFSYH-----ITVYLLKDVK--VSLYK---RDK--AMLFTY--DQYQE--	191
<i>Myotis lucifugus</i> ADID	160	-HCNIPGLYFSYH-----ITVYHKDVK--VSLYK---KDK--AVLFTF--DKYQD--	200
<i>Dasyopus novemcinctus</i> ADID	150	-HCNIPGLYFSYH-----ITVYMKDVK--VSLFK---KDK--AVLFTY--DQYQE--	190
<i>Loxodonta africana</i> ADID	151	-HCNIPGVYFSYH-----ITVYMKDVK--VSLFK---KDK--AVLFTY--DQYQE--	191
<i>Homo sapiens</i> ADIE	144	-TCKVPGVYFAVH-----ATVYRASLQ--FDLVK---NGE--SIASFF--QFFGGW--	185
<i>Pan troglodytes</i> ADIE	144	-TCKVPGVYFAVH-----ATVYRASLQ--FDLVK---NGE--SIASFF--QFFGGW--	185
<i>Pongo abelii</i> ADIE	144	-TCKVPGVYFAVH-----ATVYRASLQ--FDLVK---NGE--SIASFF--QFFGGW--	185
<i>Papio hamadryas</i> ADIE	144	-TCKVPGVYFAVH-----ATVYRASLQ--FDLVK---NGE--SIASFF--QFFGGW--	185
<i>Callithrix jacchus</i> ADIE	144	-TCKVPGVYFAVH-----ATVYRASLQ--FDLMK---NGE--SIASFF--QFFGGW--	185
<i>Otolemur garnettii</i> ADIE	144	-TCKVPGVYFAVH-----ATVYRASLQ--FDLVK---NGV--SIASFF--QFFGGW--	185
<i>Mus musculus</i> Adie	144	-TCKVPGVYFAVH-----ATVYRASLQ--FDLVK---NGQ--SIASFF--QYFGGW--	185
<i>Rattus norvegicus</i> Adie	144	-TCKVPGVYFAVH-----ATVYRASLQ--FDLVK---NGQ--SIASFF--QFFGGW--	185
<i>Homo sapiens</i> ADIF1	242	-TCHIAGVYFETYH-----ITVFSRNVQ--VSLVK---NGV--KILHTK--DAYM---	281
<i>Homo sapiens</i> ADIF2	242	-TCHIAGVYFETYH-----ITVFSRNVQ--VSLVK---NGV--KILHTK--DAYM---	281
<i>Pan troglodytes</i> ADIF1	242	-TCHIAGVYFETYH-----ITVFSRNVQ--VSLVK---NRV--KILHTK--DAYM---	281
<i>Pongo abelii</i> ADIF1	242	-TCHIAGVYFETYH-----ITVFSRNVQ--VSLVK---NGV--KILHTK--DAYM---	281
<i>Nomascus leucogenys</i> ADIF1	242	-TCHIAGVYFETYH-----ITVFSRNVQ--VSLVK---NGV--KILHTK--DAYM---	281
<i>Macaca mulatta</i> ADIF1	242	-TCHIAGVYFETYH-----ITVFSRNVQ--VSLVK---NGV--KILHTK--DAYM---	281
<i>Papio hamadryas</i> ADIF1	242	-TCHIAGVYFETYH-----ITVFSRNVQ--VSLVK---NGV--KILHTK--DAYM---	281

<i>Microcebus murinus</i> ADIF1	242	-TCHVAGVYFETYH-----ITVFSRNVQ-VSLVK---NGA-KVLHTK---DGYM---	281
<i>Otolemur garnettii</i> ADIF1	242	-VCHVAGVYFETYH-----ITVFSRNVQ-VSLVK---NGV-KILHTK---DGYM---	281
<i>Mus musculus</i> Adif1	271	-TCHVAGVYFETYH-----ITVFSRNVQ-VSLVK---NGV-KVLHTK---DSYM---	310
<i>Rattus norvegicus</i> Adif1	258	-TCHVAGVYFETYH-----ITVFSRNVQ-VSLVK---NGV-KVLHTK---DGYM---	297
<i>Cavia porcellus</i> ADIF1	242	-TCHIAGTYFETYH-----VTVFSRNVQ-VALVK---NGV-KVLHTK---DGYM---	281
<i>Oryctolagus cuniculus</i> ADIF1	242	-TCHVAGVYFETYH-----ITVFSRNVQ-VSLVK---NGV-KVLHTK---DGYM---	281
<i>Ochotona princeps</i> ADIF1	242	-ICVYAGVYFETYH-----ITVFSRNVQ-VSLVK---NGM-KVLHTK---DAYM---	281
<i>Bos taurus</i> ADIF1	242	-TCHVAGVYFETYH-----ITVFSRNIQ-VSLVK---NGA-KVLHTK---DGYT---	281
<i>Equus caballus</i> ADIF1	242	-TCHLAGVYFETYH-----VTVFSRNVQ-VSLVK---NGV-KILHTK---DGYT---	281
<i>Canis lupus familiaris</i> ADIF1	242	-TCHVAGVYFETYH-----ITVFSRNVQ-VSLVK---NGV-KILHTK---DSYM---	281
<i>Felis catus</i> ADIF1	242	-TCHVAGVYFETYH-----ITVFSRNVQ-VALVK---NGV-KILHTK---DGYM---	281
<i>Dasyopus novemcinctus</i> ADIF1	243	-TCHIAGTYFETYH-----ITVFSRNVQ-VSLVK---NGV-KVLHTK---DSYM---	282
<i>Loxodonta africana</i> ADIF1	242	-TCHIAGTYFETYH-----ITVFSRNVQ-VSLVK---NGV-KVLHTK---DGYL---	281
<i>Homo sapiens</i> ADIG	240	-ICAFPGIYFESYD-----ITLANKHLA-IGLVH---NGQ-YRIKTF---DANTG--	280
<i>Pan troglodytes</i> ADIG	240	-ICAFPGIYFESYD-----ITLANKHLA-IGLVH---NGQ-YRIKTF---DANTG--	280
<i>Pongo abelii</i> ADIG	240	-ICAFPGIYFESYD-----ITLANKHLA-IGLVH---NGQ-YRIKTF---DANTG--	280
<i>Callithrix jacchus</i> ADIG	226	-ICAFPGIYFESYD-----ITLANKHLA-IGLVH---NGQ-YRIKTF---DANTG--	266
<i>Otolemur garnettii</i> ADIG	186	-ICAFPGIYFESYD-----ITLANKHLA-IGLVH---NGQ-YRIKTF---DANTG--	226
<i>Mus musculus</i> Adig	228	-ICAFPGIYFESYD-----ITLANKHLA-IGLVH---NGQ-YRIRTF---DANTG--	268
<i>Rattus norvegicus</i> Adig	229	-ICAFPGIYFESYD-----ITLANKHLA-IGLVH---NGQ-YRIRTF---DANTG--	269
<i>Cavia porcellus</i> ADIG	186	-ICAFPGIYFESYD-----ITLANKHLA-IGLVH---NGQ-YRIKTF---DANTG--	226
<i>Oryctolagus cuniculus</i> ADIG	186	-ICAFPGIYFESYD-----ITLANKHLA-IGLVH---NGQ-YRIRTF---DANTG--	226
<i>Tursiops truncatus</i> ADIG	238	-ICAFPGIYFESYD-----ITLANKHLA-IGLVH---NGQ-YRIKTF---DANTG--	278
<i>Bos taurus</i> ADIG	186	-ICAFPGIYFESYD-----ITLANKHLA-IGLVH---NGQ-YRIKTF---DANTG--	226
<i>Equus caballus</i> ADIG	227	-ICAFPGIYFESYD-----ITLANKHLA-IGLVH---NGQ-YRIKTF---DANTG--	267
<i>Canis lupus familiaris</i> ADIG	227	-ICAFPGIYFESYD-----ITLANKHLA-IGLVH---NGQ-YRIKTF---DANTG--	267
<i>Myotis lucifugus</i> ADIG	186	-ICAFPGIYFESYD-----ITLANKHLA-IGLVH---NGQ-YRIKTF---DANTG--	226
<i>Homo sapiens</i> ADIH	188	-VCGVPGIYFETYD-----ITLANKHLA-IGLVH---NGQ-YRIKTF---DANTG--	228
<i>Pan troglodytes</i> ADIH	188	-VCGVPGIYFETYD-----ITLANKHLA-IGLVH---NGQ-YRIRTF---DANTG--	228
<i>Pongo abelii</i> ADIH	188	-VCGVPGIYFETYD-----ITLANKHLA-IGLVH---NGQ-YRIRTF---DANTG--	228
<i>Nomascus leucogenys</i> ADIH	188	-VCGVPGIYFETYD-----ITLANKHLA-IGLVH---NGQ-YRIRTF---DANTG--	228
<i>Macaca mulatta</i> ADIH	188	-VCGVPGIYFETYD-----ITLANKHLA-IGLVH---NGQ-YRIRTF---DANTG--	228
<i>Papio hamadryas</i> ADIH	188	-VCGVPGIYFETYD-----ITLANKHLA-IGLVH---NGQ-YRIRTF---DANTG--	228
<i>Mus musculus</i> Adih	195	-VCSVPGIYFETYD-----ITLANKHLA-IGLVH---NGQ-YRIRTF---DANTG--	235
<i>Rattus norvegicus</i> Adih	232	-VCSVPGIYFETYD-----ITLANKHLA-IGLVH---NGQ-YRIRTF---DANTG--	272
<i>Dipodomys ordii</i> ADIH	188	-VCGVPGVYFETYD-----ITLANKHLA-IGLVH---NGQ-YRIRTF---DANTG--	228
<i>Cavia porcellus</i> ADIH	188	-ICGVPGIYFETYD-----ITLANKHLA-IGLVH---NGQ-YRIRTF---DANTG--	228
<i>Bos taurus</i> ADIH	205	-VCGVPGIYFETYD-----ITLANKHLA-IGLVH---NGQ-YRIRTF---DANTG--	245
<i>Equus caballus</i> ADIH	188	-VCGVPGIYFESYD-----ITLANKHLA-IGLVH---NGQ-YRIRTF---DANTG--	228
<i>Canis lupus familiaris</i> ADIH	188	-VCGVPGIYFETYD-----ITLANKHLA-IGLVH---NGQ-YRIRTF---DANTG--	228
<i>Pteropus vampyrus</i> ADIH	188	-VCSVPGIYFETYD-----ITLANKHLA-IGLVH---NGQ-YRIRTF---DANTG--	228
<i>Loxodonta africana</i> ADIH	188	-VCGVPGIYFETYD-----ITLANKHLA-IGLVH---NGQ-YRIRTF---DANTG--	228
<i>Homo sapiens</i> ADII	196	-SQQVRGIYFETYHILMRGGDGTSMW-ADL-C---K---NGQ-VRASAI-AQADQ---	240
<i>Pongo abelii</i> ADII	196	-SQQVRGIYFETYHILMRGGDGTSMW-ADL-C---K---NGQ-VRASAI-AQADQ---	240
<i>Macaca mulatta</i> ADII	196	-SQQVRGIYFETYHILMRGGDGTSMW-ADL-C---K---NGQ-VRASAI-AQADQ---	240
<i>Mus musculus</i> Adii	196	-SQQVRGIYFETYHILMRGGDGTSMW-ADL-C---K---NGQ-VRASAI-AQADQ---	240
<i>Rattus norvegicus</i> Adii	196	-SQQVRGIYFETYHILMRGGDGTSMW-ADL-C---K---NGQ-VRASAI-AQADQ---	240
<i>Bos taurus</i> ADII	196	-SQQVRGIYFETYHILMRGGDGTSMW-ADL-C---K---NGQ-VRASAI-AQADQ---	240
<i>Canis lupus familiaris</i> ADII	196	-SQQVRGIYFETYHILMRGGDGTSMW-ADL-C---K---NGQ-VRASAI-AQADQ---	240
<i>Dasyopus novemcinctus</i> ADII	196	-SQQVRGIYFETYHILMRGGDGTSMW-ADL-C---K---NGQ-VRASAI-AQADQ---	240
<i>Homo sapiens</i> ADIJ	164	-TCSIPGIYFETYHVLMRGGDGTSMW-ADL-C---K---NNQ-VRASAI-AQADQ---	208
<i>Pan troglodytes</i> ADIJ	164	-TCSIPGIYFETYHVLMRGGDGTSMW-ADL-C---K---NNQ-VRASAI-AQADQ---	208
<i>Papio hamadryas</i> ADIJ	164	-TCSIPGIYFETYHVLMRGGDGTSMW-ADL-C---K---NNQ-VRASAI-AQADQ---	208
<i>Mus musculus</i> Adij	164	-TCSIPGIYFETYHVLMRGGDGTSMW-ADL-C---K---NNQ-VRASAI-AQADQ---	208
<i>Rattus norvegicus</i> Adij	164	-TCSIPGIYFETYHVLMRGGDGTSMW-ADL-C---K---NNQ-VRASAI-AQADQ---	208
<i>Oryctolagus cuniculus</i> ADIJ	164	-TCSIPGIYFETYHVLMRGGDGTSMW-ADL-C---K---NNQ-VRASAI-AQADQ---	208
<i>Bos taurus</i> ADIJ	164	-TCSIPGIYFETYHVLMRGGDGTSMW-ADL-C---K---NNQ-VRASAI-AQADQ---	208
<i>Canis lupus familiaris</i> ADIJ	164	-TCSIPGIYFETYHVLMRGGDGTSMW-ADL-C---K---NNQ-VRASAI-AQADQ---	208
<i>Loxodonta africana</i> ADIJ	164	-TCSIPGIYFETYHVLMRGGDGTSMW-ADL-C---K---NNQ-VRASAI-AQADQ---	208
<i>Homo sapiens</i> ADIK	147	-TCPMPGVYFFAYHVLMRGGDGTSMW-ADL----MK---NGQ-VRASAI-AQADQ---	191
<i>Pan troglodytes</i> ADIK	147	-TCPMPGVYFFAYHVLMRGGDGTSMW-ADL----MK---NGQ-VRASAI-AQADQ---	191
<i>Gorilla gorilla</i> ADIK	147	-TCPMPGVYFFAYHVLMRGGDGTSMW-ADL----MK---NGQ-VRASAI-AQADQ---	191
<i>Papio hamadryas</i> ADIK	147	-TCPMPGVYFFAYHVLMRGGDGTSMW-ADL----MK---NGQ-VRASAI-AQADQ---	191
<i>Callithrix jacchus</i> ADIK	147	-TCPMPGVYFFAYHVLMRGGDGTSMW-ADL----MK---NGQ-VRASAI-AQADQ---	191
<i>Rattus norvegicus</i> Adik	147	-TCPMPGVYFFAYHVLMRGGDGTSMW-ADL----MK---NGQ-VRASAI-AQADQ---	191
<i>Cavia porcellus</i> ADIK	147	-TCPMPGVYFFAYHVLMRGGDGTSMW-ADL----MK---NGQ-VRASAI-AQADQ---	191
<i>Equus caballus</i> ADIK	147	-TCPMPGVYFFAYHVLMRGGDGTSMW-ADL----MK---NGQ-VRASAI-AQADQ---	191
<i>Canis lupus familiaris</i> ADIK	147	-TCPMPGVYFFAYHVLMRGGDGTSMW-ADL----MK---NGQ-VRASAI-AQADQ---	191
<i>Dasyopus novemcinctus</i> ADIK	147	-TCPMPGVYFFAYHVLMRGGDGTSMW-ADL----MK---NGQ-VRASAI-AQADQ---	191
<i>Loxodonta africana</i> ADIK	147	-TCPMPGVYFFAYHVLMRGGDGTSMW-ADL----MK---NGQ-VRASAI-AQADQ---	191
<i>Mus musculus</i> Adil	167	-TCSNIPGTYFETYHVLMRGGDGTSMW-ADL-C---K---NGQ-VRASAI-AQADQ---	211
<i>Rattus norvegicus</i> Adil	167	-TCSNIPGTYFETYHVLMRGGDGTSMW-ADL-C---K---NGQ-VRASAI-AQADQ---	211
<i>Homo sapiens</i> ADIM	267	GA-PVSGVYFFTFSM-MKHEDVEEVY-----VYLMH---NGN-TVFSMY--SYEM---	308
<i>Pan troglodytes</i> ADIM	267	GA-PVSGVYFFTFSM-MKHEDVEEVY-----VYLMH---NGN-TVFSMY--SYEM---	308

<i>Pongo abelii</i> ADIM	223	GA-PVSGVYFF	TFSM-MKHEDVEEVY-----	VYLMH---	NGN-TVFSMY--	SYEM----	264
<i>Nomascus leucogenys</i> ADIM	267	GA-PVSGVYFF	TFSM-MKHEDVEEVY-----	VYLMH---	NGN-TVFSMY--	SYEM----	308
<i>Papio hamadryas</i> ADIM	267	GA-PVSGVYFF	TFSM-MKHEDVEEVY-----	VYLMH---	NGN-TVFSMY--	SYEM----	308
<i>Callithrix jacchus</i> ADIM	257	GA-PVSGVYFF	TFSM-MKHEDVEEVY-----	VYLMH---	NGN-TVFSMY--	SYET----	298
<i>Mus musculus</i> Adim	156	GA-PVSGVYFF	TFSM-MKHEDVEEVY-----	VYLMH---	NGN-TVFSMY--	SYET----	197
<i>Rattus norvegicus</i> Adim	230	GA-PVSGVYFF	TFSM-MKHEDVEEVY-----	VYLMH---	NGN-TVFSMY--	SYET----	271
<i>Cavia porcellus</i> ADIM	223	GA-PVSGVYFF	TFSM-MKHEDVDEVY-----	VYLMH---	NGN-TVFSMY--	SYET----	264
<i>Bos taurus</i> ADIM	156	GA-PVSGVYFF	TFSM-MKHEDVEEVY-----	VYLMH---	NGN-TVFSMY--	SYET----	197
<i>Equus caballus</i> ADIM	156	GA-PVSGVYFF	TFSM-MKHEDVEEVY-----	VYLMH---	NGN-TVFSMY--	SYET----	197
<i>Canis lupus familiaris</i> ADIM	217	GA-PVSGVYFF	TFSM-MKHEDVEEVY-----	VYLMH---	NGN-TVFSMY--	SYET----	258
<i>Homo sapiens</i> ADIN	222	-RRLPGAYFF	SFTLG-KLPRK-TLS-----	VKLMK---	NRDEVQAMIY--	DDGAS---	264
<i>Pan troglodytes</i> ADIN	222	-RRLPGAYFF	SFTLG-KMPRK-TLS-----	VKLMK---	NRDEVQAMIY--	DDGAS---	264
<i>Pongo abelii</i> ADIN	222	-RRLPGAYFF	SFTLG-KLPRK-TLS-----	VKLMK---	NRDEVQAMIY--	DDGAS---	264
<i>Nomascus leucogenys</i> ADIN	217	-RRLPGAYFF	SFTLG-KLPRK-TLS-----	VKLMK---	NRDEVQAMIY--	DDGAS---	259
<i>Macaca mulatta</i> ADIN	224	-RRLPGAYFF	SFTLG-KLPRK-TLS-----	VKLMK---	NRDEVQAMIY--	DDGAS---	266
<i>Callithrix jacchus</i> ADIN	222	-RRLPGAYFF	SFTLG-KLPRK-TLS-----	VKLMK---	NRDEVQAMIY--	DDGAS---	264
<i>Mus musculus</i> Adin	220	-RRLPGAYFF	SFTLG-KLPRK-TLS-----	VKLMK---	NRDEVQAMIY--	DDGAS---	262
<i>Cavia porcellus</i> ADIN	232	-RRLPGAYFF	SFTLG-KMPRK-TLS-----	VKLMK---	NRDEVQAMIY--	DDGAS---	274
<i>Tursiops truncatus</i> ADIN	218	-RRLPGAYFF	SFTLG-KLPRK-TLS-----	VKLMK---	NRDEVQAMIY--	DDGTS---	260
<i>Canis lupus familiaris</i> ADIN	218	-RRLPGAYFF	SFTLG-KLPRK-TLS-----	VKLMK---	NRDEVQAMIY--	DDGAS---	260
<i>Dasyops novemcinctus</i> ADIN	218	-RRLPGAYFF	SFTLG-KLPRK-TLS-----	VKLMK---	NRDEVQAMIY--	DDGAS---	260
<i>Loxodonta africana</i> ADIN	218	-RRLPGAYFF	SFTLG-KLPRK-TLS-----	VKLMK---	NRDEVQAMIY--	DDGGS---	260
<i>Homo sapiens</i> ADIO	157	-LCTVPGVYFL	SLNVH-TWNYKET-Y-----	LHIML---	NRRPA-AVLY-AQPSE----	198	
<i>Pan troglodytes</i> ADIO	157	-LCTVPGVYFL	SLNVH-TWNYKET-Y-----	LHVML---	NRRPA-AVLY-AQPSE----	198	
<i>Macaca mulatta</i> ADIO	152	-LCTVPGVYFL	SLNVH-TWNYKET-Y-----	LHIML---	NRRPA-AVLY-AQPSE----	193	
<i>Bos taurus</i> ADIO	156	-FCTAPGVYFL	SLNVH-TWNYKET-Y-----	LHIMR---	NARAA-AVLY-AQPSE----	197	
<i>Myotis lucifugus</i> ADIO	156	-LCIVPGVYFL	SLTVH-TWNYKET-Y-----	LHIMC---	NQQT-AVLY-AQPSE----	197	
<i>Homo sapiens</i> ADIP	284	-YCYVPGIYFF	SLNVH-TWNQKET-Y-----	LHIMK---	NEEEV-VILF-AQVGD----	325	
<i>Otolemur garnettii</i> ADIP	186	-YCYVPGIYFF	SLNVH-TWNQKET-Y-----	LHIMR---	NAAEV-VILY-AQVSD----	227	
<i>Mus musculus</i> Adip	186	-YCYVPGIYFF	SLNVH-TWNQKET-Y-----	LHIMK---	NEEEV-VILY-AQVSD----	227	
<i>Cavia porcellus</i> ADIP	186	-YCYVPGIYFF	SLNVH-TWNQKET-Y-----	LHIMR---	NAAEV-VILY-AQVSD----	227	
<i>Bos taurus</i> ADIP	209	-YCYVPGIYFF	SLNVH-TWNQKET-Y-----	LHIMK---	NAAEV-VILY-AQVSD----	250	
<i>Equus caballus</i> ADIP	184	-YCYVPGIYFF	SLNVH-TWNQKET-Y-----	LHIMK---	NGEEV-VILY-AQVSD----	225	
<i>Loxodonta africana</i> ADIP	238	-YCYVPGIYFF	SLNVH-TWNQKET-Y-----	LHIMR---	NAAEA-VILY-AQVSD----	279	
<i>Homo sapiens</i> ADIQ	184	AA-PLRGIYFF	SLNVH-SWNYKET-Y-----	VHIMH---	NQKEA-VILY-AQPSE----	225	
<i>Pan troglodytes</i> ADIQ	184	AA-PLRGIYFF	SLNVH-SWNYKET-Y-----	VHIMH---	NQKEA-VILY-AQPSE----	225	
<i>Pongo abelii</i> ADIQ	184	AA-PLRGIYFF	SLNVH-SWNYKET-Y-----	VHIMH---	NQKEA-VILY-AQPSE----	225	
<i>Nomascus leucogenys</i> ADIQ	184	AA-PLRGIYFF	SLNVH-SWNYKET-Y-----	VHIMH---	NQKEA-VILY-AQPSE----	225	
<i>Macaca mulatta</i> ADIQ	184	AA-PLRGIYFF	SLNVH-SWNYKET-Y-----	VHIMH---	NQKEA-VILY-AQPSE----	225	
<i>Mus musculus</i> Adiq	170	VA-PLRGLYFF	SLNVH-SWNYKET-Y-----	VHIVH---	NEQAV-VILY-AQPSE----	211	
<i>Rattus norvegicus</i> Adiq	169	VA-PLRGLYFF	SLNVH-SWNYKET-Y-----	VHIVH---	NEQAV-VILY-AQPSE----	210	
<i>Homo sapiens</i> ADIR	69	-NCPVNGTYVF	IFHML-KLAVNVPLY-----	VNLMK---	N-EEVLVSAY-ANDGAP---	112	
<i>Pan troglodytes</i> ADIR	69	-NCPVNGTYVF	IFHML-KLAVNVPLY-----	VNLMK---	N-EEVLVSAY-ANDGAP---	112	
<i>Pongo abelii</i> ADIR	69	-NCPVNGTYVF	IFHML-KLAVNVPLY-----	VNLMK---	N-EEVLVSAY-ANDGAP---	112	
<i>Nomascus leucogenys</i> ADIR	69	-NCPVNGTYVF	IFHML-KLAVNVPLY-----	VNLMK---	N-EEVLVSAY-ANDGAP---	112	
<i>Macaca mulatta</i> ADIR	69	-NCPVNGTYVF	IFHML-KLAVNVPLY-----	VNLMK---	N-EEVLVSAY-ANDGAP---	112	
<i>Papio hamadryas</i> ADIR	69	-NCPVNGTYVF	IFHML-KLAVNVPLY-----	VNLMK---	N-EEVLVSAY-ANDGAP---	112	
<i>Callithrix jacchus</i> ADIR	69	-NCPVNGTYVF	IFHML-KLAVNVPLY-----	VNLMK---	N-EEVLVSAY-ANDGAP---	112	
<i>Tarsius syrichta</i> ADIR	69	-NCPVNGTYVF	IFHML-KLAVNVPLY-----	VNLMK---	N-EEVLVSAY-ANDGAP---	112	
<i>Otolemur garnettii</i> ADIR	69	-NCPVNGTYVF	IFHML-KLAVNVPLY-----	VNLMK---	N-EEVLVSAY-ANDGAP---	112	
<i>Tupaia belangeri</i> ADIR	69	-NCPVNGTYVF	IFHML-KLAVNVPLY-----	VNLMK---	N-EEVLVSAY-ANDGAP---	112	
<i>Mus musculus</i> Adir	69	-NCPVNGTYVF	IFHML-KLAVNVPLY-----	VNLMK---	N-EEVLVSAY-ANDGAP---	112	
<i>Rattus norvegicus</i> Adir	69	-NCPVNGTYVF	IFHML-KLAVNVPLY-----	VNLMK---	N-EEVLVSAY-ANDGAP---	112	
<i>Cavia porcellus</i> ADIR	69	-SCPVNGTYVF	IFHML-KLAVNVPLY-----	VNLMK---	N-EEVLVSAY-ANDGAP---	112	
<i>Oryctolagus cuniculus</i> ADIR	69	-NCPVNGTYVF	IFHML-KLAVNVPLY-----	VNLMK---	N-EEVLVSAY-ANDGAP---	112	
<i>Tursiops truncatus</i> ADIR	69	-NCPVNGTYVF	IFHML-KLAVNVPLY-----	VNLMK---	N-EEVLVSAY-ANDGAP---	112	
<i>Bos taurus</i> ADIR	69	-NCPVNGTYVF	IFHML-KLAVNVPLY-----	VNLMK---	N-EEVLVSAY-ANDGAP---	112	
<i>Equus caballus</i> ADIR	69	-NCPVNGTYVF	IFHML-KLAVNVPLY-----	VNLMK---	N-EEVLVSAY-ANDGAP---	112	
<i>Canis lupus familiaris</i> ADIR	69	-NCPVNGTYVF	IFHML-KLAVNVPLY-----	VNLMK---	N-EEVLVSAY-ANDGAP---	112	
<i>Myotis lucifugus</i> ADIR	69	-NCPVNGTYVF	IFHML-KLAVNVPLY-----	VNLMK---	N-EEVLVSAY-ANDGAP---	112	
<i>Pteropus vampyrus</i> ADIR	69	-NCPVNGTYVF	IFHML-KLAVNVPLY-----	VNLMK---	N-EEVLVSAY-ANDGAP---	112	
<i>Erinaceus europaeus</i> ADIR	43	-ACPVNGTYVF	IFHML-KLAVNVPLY-----	VNLMR---	N-EEVLVSAY-ANDGAP---	86	
<i>Dasyops novemcinctus</i> ADIR	69	-NCPVNGTYVF	IFHML-KLAVNVPLY-----	VNLMK---	N-EEVLVSAY-ANDGAP---	112	
<i>Choloepus hoffmanni</i> ADIR	69	-NCPVNGTYVF	IFHML-KLAVNVPLY-----	VNLMK---	N-EEVLVSAY-ANDGAP---	112	
<i>Loxodonta africana</i> ADIR	69	-NCPVNGTYVF	IFHML-KLAVNVPLY-----	VNLMK---	N-EEVLVSAY-ANDGAP---	112	

*Homo sapiens* ADIA 203 --NTFQVTTGGMVLKLEQGENVFLQA--TD--KNSLL--GMEGANSIFSGFLLFPD-MEA 253  
790 800 810 820 830 840  
*Homo sapiens* ADIA 203 --NTFQVTTGGMVLKLEQGENVFLQA--TD--KNSLL--GMEGANSIFSGFLLFPD-MEA 253  
*Papio hamadryas* ADIA 203 --NTFQVTTGGMVLKLEQGENVFLQA--TD--KNSLL--GMEGANSIFSGFLLFPD-VEA 253  
*Mus musculus* Adia 232 --NTFQVTTGGVVLKLEQEEVHVLQA--TD--KNSLL--GIEGANSIFSGFLLFPD-MDA 282  
*Rattus norvegicus* Adia 203 --NTFQVTTGGVVLKLEQEEVHVLQA--TD--KNSLL--GVEGANSIFSGFLLFPD-MDV 253  
*Cavia porcellus* ADIA 201 --NSFQVTTGGVVLKLEREEMVYLEA--TN--QNALL--GIEGANSIFSGFLLFPD-VEL 251  
*Ochotona princeps* ADIA 201 --STFQVTTGGVVLKLEMGESVHLQA--ND--KNSLL--AMEGANSIFSGFLLFPD-ADV 251  
*Bos taurus* ADIA 197 --NTFQVTTGSIVLKLKEDTVFLQA--TE--KNALV--GIEGANSIFSGFLLFPD-TEA 247  
*Equus caballus* ADIA 202 --NTFQVTTGGIVLKLLEETVFLQA--TD--RNSLL--GMEGANSIFSGFLLFPD-REA 252  
*Canis lupus familiaris* ADIA 200 --NTFQVTTGSVVLKLSQGENVFLQA--TD--KNSLL--GMEGANSIFSGFLLFPD-AEA 250  
*Felis catus* ADIA 204 --NTFQVSTGSMVLKLEKQGENVFLQA--TD--KNSLV--GIEGANSIFSGFLLFPD-VEA 254  
*Myotis lucifugus* ADIA 201 --STFQVTTGGIVLKLGLGESVFLQA--TD--RNSLL--GIEGANSIFSGFLLFPN-PEV 251  
*Dasypus novemcinctus* ADIA 198 --SSFQVTTGGVVLKLEGLGENVFLQA--TD--RNSLL--GLDGANSIFSGFLLFPD-AEA 248  
*Loxodonta africana* ADIA 201 --STFQVTTMGVVLKLAQGENVFLQA--TD--KNSLL--GMEGANSIFSGFLLFPD-AEA 251  
*Homo sapiens* ADIB 198 --KTNQVNSGGVLLRLQVGEVVLAV--ND--YYDMV--GIQGSDFSGFLLFPD---- 245  
*Pan troglodytes* ADIB 198 --KTNQVNSGGVLLRLQVGEVVLAV--ND--YYEMV--GIQGSDFSGFLLFPD---- 245  
*Pongo abelii* ADIB 198 --KTNQVNSGGVLLRLQVGEVVLAV--ND--YYDMV--GIQGSDFSGFLLFPD---- 245  
*Nomascus leucogenys* ADIB 199 --KTNQVNSGGVLLRLQVGEVVLAV--ND--YYEMV--GIQGSDFSGFLLFPD---- 246  
*Callithrix jacchus* ADIB 197 --NTKQVNSGGVLLRLQVGEVVLAV--ND--YNGMV--GIEGSDVFSGFLLFPD---- 244  
*Otolemur garnettii* ADIB 196 --NSKQVNSGGVLLRLQVGEVVLAV--ND--YNGMV--GTEGSDVFSGFLLFPD---- 243  
*Mus musculus* Adib 229 --NSKQVNSGGVLLRLQVGEVVLAV--ND--YNGMV--GIEGSDVFSGFLLFPD---- 276  
*Rattus norvegicus* Adib 221 --NSKQVNSGGVLLRLQVGEVVLAV--ND--YNGMV--GTEGSDVFSGFLLFPD---- 268  
*Cavia porcellus* ADIB 248 SQDSKQVTSGGVVLHLQQAQVVLGV--ND--YNGMV--GTQGSDFSGFLLFPD---- 297  
*Oryctolagus cuniculus* ADIB 251 --NTKQVNSGGVLLRLQVGEVVLAV--ND--YNGMV--GTEGSDVFSGFLLFPD---- 298  
*Bos taurus* ADIB 196 --SAKQVNSGGVLLRLQVGEVVLAV--ND--YNGMV--GMEGSDVFSGFLLFPD---- 243  
*Equus caballus* ADIB 216 --NSKQVNSGGVLLRLQVGEVVLAV--ND--YNGMV--GTRGSDVFSGFLLFPD---- 263  
*Canis lupus familiaris* ADIB 198 --NSKQVNSGGVLLRLQVGEVVLAV--ND--YNGMV--GTEGSDVFSGFLLFPD---- 245  
*Myotis lucifugus* ADIB 198 --NSKQVNSGGVLLRLQQAQVVLAV--ND--YNGMV--GTEGSDVFSGFLLFPD---- 245  
*Loxodonta africana* ADIB 196 --NKKQVNSGGVLLRLQVGEVVLAV--ND--YNGMV--GTEGSDVFSGFLLFPD---- 243  
*Homo sapiens* ADIC 195 --KGLFQVNSGGMVLQLQGDQVWVE---KDP--KKGHIYQGSE--ADSVFSGFIIFP--S-A 245  
*Macaca mulatta* ADIC 195 --KGLFQVNSGGMVLQLQGDQVWVE---KDP--RKGNIYQGLE--ADSVFSGFIIFP--S-T 245  
*Papio hamadryas* ADIC 195 --KGLFQVNSGGMVLQLQGDQVWVE---KDP--RKGNIYHGLE--ADSVFSGFIIFP--S-T 245  
*Callithrix jacchus* ADIC 195 --KGLFQVNSGGMVLQLQGDQVWVE---KDP--SKGRIYQGSE--ADSVFSGFIIFP--S-A 245  
*Mus musculus* Adic 195 --KGLFQVLAGGTVLQLRRGDEVWIE---KDP--AKGRIYQTE--ADSVFSGFIIFP--S-A 245  
*Rattus norvegicus* Adic 207 --KGLFQVLAGGTVLQLRRGDEVWIE---KDP--AKGRIYQTE--ADSVFSGFIIFP--S-A 257  
*Cavia porcellus* ADIC 195 --KGLFQVLAGGTVLQLRRGDEVWIE---KDP--SKGNIYQGLE--ADSVFSGFIIFP--S-V 244  
*Oryctolagus cuniculus* ADIC 236 --KGLFQVNSGGTALQLQGDQVWVE---KDP--ARGRIYQTE--ADSVFSGFIIFP--S-A 286  
*Equus caballus* ADIC 228 --RGIFQVNSGGTALQLDRGDKVRIE---KE---RGRIYQGE--ADSVFSGFIIFP--S-T 276  
*Canis lupus familiaris* ADIC 214 --KGLFQVNSGGMALQLQGDQVWVE---KDP--IKGRIYQPE--ADSVFSGFIIFP--S-L 264  
*Myotis lucifugus* ADIC 195 --RGTQVNSGGTALQLQGDQVWVE---KDP--VKGRIYQTE--ADSVFSGFIIFP--S-A 245  
*Loxodonta africana* ADIC 210 --RGLFQVNSGGTALQLQGDQVWVE---KDP--VKGHIYQTD--ADSVFSGFIIFP--S-T 260  
*Homo sapiens* ADID 223 --NNVDQASGSVLLHLEVGDVVLLQVYGE--RNG--LYAD--NDNSTFTGFLLYHD--TN- 275  
*Pan troglodytes* ADID 223 --NNVDQASGSVLLHLEVGDVVLLQVYGE--RNG--LYAD--NDNSTFTGFLLYHD--TN- 275  
*Pongo abelii* ADID 192 --NNVDQASGSVLLHLEVGDVVLLQVYGE--RNG--LYAD--NDNSTFTGFLLYHD--TN- 244  
*Nomascus leucogenys* ADID 222 --NNVDQASGSVLLHLEVGDVVLLQVYGE--RNG--LYAD--NDNSTFTGFLLYHD--TN- 274  
*Macaca mulatta* ADID 221 --NNVDQASGSVLLHLEVGDVVLLQVYGE--RNG--LYAD--NDNSTFTGFLLYHD--TN- 273  
*Otolemur garnettii* ADID 192 --KNVDQASGSVLLHLEVGDVVLLQVYGD--HNG--LYAD--NVNSTFTGFLLYHD--TN- 244  
*Mus musculus* Adid 206 --KNVDQASGSVLLHLEVGDVVLLQVYGD--HNG--LYAD--NVNSTFTGFLLYHD--TN- 258  
*Rattus norvegicus* Adid 192 --KNVDQASGSVLLHLEVGDVVLLQVYGD--HNG--LYAD--NVNSTFTGFLLYHD--TN- 244  
*Cavia porcellus* ADID 234 --KNVDQASGSVLLHLEVGDVVLLQVYGN--QAG--VYAD--NVNSTFTGFLLYHD--LTD 288  
*Oryctolagus cuniculus* ADID 202 --KNVDQASGSVLLHLEVGDVVLLQVYGD--HNG--LYAD--NVNSTFTGFLLYHD--TE- 254  
*Bos taurus* ADID 187 --KNVDQASGSVLLHLEVGDVVLLQVYGE--HNG--VYAD--NVNSTFTGFLLYHN--IVE- 240  
*Equus caballus* ADID 249 --KNLDQASGSVLLHLEVGDVVLLQVYGD--HNG--LYAD--NVNSTFTGFLLYHD--TN- 301  
*Canis lupus familiaris* ADID 201 --KNVDQASGSVLLHLEVGDVVLLQVYGD--SYG--IYAD--NVNSTFTGFLLYHD--TN- 253  
*Felis catus* ADID 192 --KNVDQASGSVLLHLEVGDVVLLQVYGD--YNG--LYAD--NVNSTFTGFLLYHD--TV- 244  
*Myotis lucifugus* ADID 201 --QDQVNSGSVLLHLEMGDVVLLQVYGE--NNG--LYAD--NINDSTFTGFLLYHD--TN- 253  
*Dasypus novemcinctus* ADID 191 --KNVDQASGSVLLHLEMGDVVLLQVYGE--QMG--LYAD--NVNSTFTGFLLYHN--IE- 243  
*Loxodonta africana* ADID 192 --KNVDQASGSVLLHLEVGDVVLLQVYAD--QNG--LYAD--NVNSTFTGFLLYHD--TN- 245  
*Homo sapiens* ADIE 186 --PKPASLGGAMVRLPEPDQVWVQVGVGD--YIG--IYAS--IKTDFSGFIVYSD--WHS 238  
*Pan troglodytes* ADIE 186 --PKPASLGGAMVRLPEPDQVWVQVGVGD--YIG--IYAS--IKTDFSGFIVYSD--WHS 238  
*Pongo abelii* ADIE 186 --PKPASLGGAMVRLPEPDQVWVQVGVGD--YIG--IYAS--IKTDFSGFIVYSD--WHS 238  
*Papio hamadryas* ADIE 186 --PKPASLGGAMVRLPEPDQVWVQVGVGD--YIG--IYAS--IKTDFSGFIVYSD--WHS 238  
*Callithrix jacchus* ADIE 186 --PKPASLGGAMVRLPEPDQVWVQVGVGD--YIG--IYAS--IKTDFSGFIVYSD--WHS 238  
*Otolemur garnettii* ADIE 186 --PKPASLGGAMVRLPEPDQVWVQVGVGD--YIG--IYAS--IKTDFSGFIVYSD--WHS 238  
*Mus musculus* Adie 186 --PKPASLGGAMVRLPEPDQVWVQVGVGD--YIG--IYAS--IKTDFSGFIVYSD--WHS 238  
*Rattus norvegicus* Adie 186 --PKPASLGGAMVRLPEPDQVWVQVGVGD--YIG--IYAS--IKTDFSGFIVYSD--WHS 238  
*Homo sapiens* ADIF1 282 --SSEDQASGGIVLQLKLGDEVVLQVTTGGER--FNG--LFAD--EDDDTFTGFLIF---SSP 333  
*Homo sapiens* ADIF2 282 --SSEDQASGGIVLQLKLGDEVVLQVTTGGER--FNG--LFAD--EDDDTFTGFLIF---SSQ 333  
*Pan troglodytes* ADIF1 282 --SSEDQASGGIVLQLKLGDEVVLQVTTGGER--FNG--LFAD--EDDDTFTGFLIF---SSP 333  
*Pongo abelii* ADIF1 282 --SSEDQASGGIVLQLKLGDEVVLQVTTGGER--FNG--LFAD--EDDDTFTGFLIF---SSP 333  
*Nomascus leucogenys* ADIF1 282 --SSEDQASGGIVLQLKLGDEVVLQVTTGGER--FNG--LFAD--EDDDTFTGFLIF---SSP 333  
*Macaca mulatta* ADIF1 282 --SSEDQASGGIVLQLKLGDEVVLQVTTGGER--FNG--LFAD--EDDDTFTGFLIF---GSP 333  
*Papio hamadryas* ADIF1 282 --SSEDQASGGIVLQLKLGDEVVLQVTTGGER--FNG--LFAD--EDDDTFTGFLIF---SSP 333



<i>Microcebus murinus</i> ADIF1	282	--SSEDQASGGIVLQKLGDEVVMQVTTGGER-FNG-LFAD-EDDDTTFTGFLLF---SS-	332
<i>Otolemur garnettii</i> ADIF1	282	--GSEDQASGGIVLQKLGDEVVMQVTTGGER-FNG-LFAD-EDDDTTFTGFLLF---SS-	332
<i>Mus musculus</i> Adif1	311	--SSEDQASGGIVQELKLGDEVVMQVTTGGER-FNG-LFAD-EDDDTTFTGFLLF---SSS	362
<i>Rattus norvegicus</i> Adif1	298	--SSEDQASGGIVLELQKLGDEVVMQVTTGGER-FNG-LFAD-EDDDTTFTGFLLF---SSS	349
<i>Cavia porcellus</i> ADIF1	282	--SSEDQASGGTVLPLKLGDEVVLQVTTGGER-FNG-LFAD-EDDDTTFTGFLLF---SSP	333
<i>Oryctolagus cuniculus</i> ADIF1	282	--SSEDQASGGIVLELQKLGDEVVMQVTTGGER-FNG-LFAD-EDDDTTFTGFLLF---SS-	332
<i>Ochotona princeps</i> ADIF1	282	--SSEDQASGGVLELKLADDEVVLQVAGGER-FNG-LFAD-EDDDTTFTGFLLF---ST-	332
<i>Bos taurus</i> ADIF1	282	--SSEDQASGGTVLPLKLGDEVVMQVTTGGER-FNG-LFAD-EDDDTTFTGFLLF---SSS	333
<i>Equus caballus</i> ADIF1	282	--SSEDQASGGTILQKLGDEVVMQVTTGGER-FNG-LFAD-EDDDTTFTGFLLF---SSS	333
<i>Canis lupus familiaris</i> ADIF1	282	--SSEDQASGGIVLPLKLGDEVVMQVTTGGER-FNG-LFAD-EDDDTTFTGFLLF---SSQ	333
<i>Felis catus</i> ADIF1	282	--SSEDQASGGIVLPLKLGDEVVMQVAGGER-FNG-LFAD-EDDDTTFTGFLLF---S-Q	332
<i>Dasyopus novemcinctus</i> ADIF1	283	--SSEDQASGGMVLKLGDEVVLQASGGER-FNG-LFAD-EDDDTTFTGFLLF---SS-	333
<i>Loxodonta africana</i> ADIF1	282	--SSEDQASGGTVLELQKLGDEVVMQVTTGGER-FNG-LFAD-EDDDTTFTGFLLF---TSS	333
<i>Homo sapiens</i> ADIG	281	---NHDVASGSTVIYLPQPEDEVVLEIFFTD--QNG-LFSDPGWADSLFSGFLLYVD-TDY	333
<i>Pan troglodytes</i> ADIG	281	---NHDVASGSTVIYLPQPEDEVVLEIFFTD--QNG-LFSDPGWADSLFSGFLLYVD-TDY	333
<i>Pongo abelii</i> ADIG	281	---NHDVASGSTVIYLPQPEDEVVLEIFFTD--QNG-LFSDPGWADSLFSGFLLYVD-TDY	333
<i>Callithrix jacchus</i> ADIG	267	---NHDVASGSTVIYLPQPEDEVVLEIFFTD--QNG-LFSDPGWADSLFSGFLLYVD-TDY	319
<i>Otolemur garnettii</i> ADIG	227	---NHDVASGSTVIYLPQPEDEVVLEIFFTD--QNG-LFSDPGWADSLFSGFLLYVD-TDY	279
<i>Mus musculus</i> Adig	269	---NHDVASGSTVIYLPQPEDEVVLEIFFND--QNG-LFSDPGWADSLFSGFLLYVD-TDY	321
<i>Rattus norvegicus</i> Adig	270	---NHDVASGSTVIYLPQPEDEVVLEIFFND--QNG-LFSDPGWADSLFSGFLLYVD-TDY	322
<i>Cavia porcellus</i> ADIG	227	---NHDVASGSTVIYLPQPEDEVVLEIFFTD--QNG-LFSDPGWADSLFSGFLLYVD-TDY	279
<i>Oryctolagus cuniculus</i> ADIG	227	---NHDVASGSTVIYLPQPEDEVVLEIFFTD--QNG-LFSDPGWADSLFSGFLLYVD-TDY	279
<i>Tursiops truncatus</i> ADIG	279	---NHDVASGSTVIYLPQPEDEVVLEIFFTD--QNG-LFSDPGWADSLFSGFLLYVD-TDY	331
<i>Bos taurus</i> ADIG	227	---NHDVASGSTVIYLPQPEDEVVLEIFFTD--QNG-LFSDPGWADSLFSGFLLYVD-TDY	279
<i>Equus caballus</i> ADIG	268	---NHDVASGSTVIYLPQPEDEVVLEIFFTD--QNG-LFSDPGWADSLFSGFLLYVD-TDY	320
<i>Canis lupus familiaris</i> ADIG	268	---NHDVASGSTVIYLPQPEDEVVLEIFFTD--QNG-LFSDPGWADSLFSGFLLYVD-TDY	320
<i>Myotis lucifugus</i> ADIG	227	---NHDVASGSTVIYLPQPEDEVVLEIFFND--QNG-LFSDPGWADSLFSGFLLYVD-TDY	279
<i>Homo sapiens</i> ADIH	229	---NHDVASGSTILALKQGDEVVLQIFYSE--QNG-LFYDPYWTDSLFTGFLIYAD-QD-	280
<i>Pan troglodytes</i> ADIH	229	---NHDVASGSTILALKQGDEVVLQIFYSE--QNG-LFYDPYWTDSLFTGFLIYAD-QD-	280
<i>Pongo abelii</i> ADIH	229	---NHDVASGSTILALKQGDEVVLQIFYSE--QNG-LFYDPYWTDSLFTGFLIYAD-QD-	280
<i>Nomascus leucogenys</i> ADIH	229	---NHDVASGSTILALKQGDEVVLQIFYSE--QNG-LFYDPYWTDSLFTGFLIYAD-QD-	280
<i>Macaca mulatta</i> ADIH	229	---NHDVASGSTILALKQGDEVVLQIFYSE--QNG-LFYDPYWTDSLFTGFLIYAD-QD-	280
<i>Papio hamadryas</i> ADIH	229	---NHDVASGSTILALKQGDEVVLQIFYSE--QNG-LFYDPYWTDSLFTGFLIYAD-QD-	280
<i>Mus musculus</i> Adih	236	---NHDVASGSTILALKEGDEVVLQIFYSE--QNG-LFYDPYWTDSLFTGFLIYAD-QG-	287
<i>Rattus norvegicus</i> Adih	273	---NHDVASGSTILALKEGDEVVLQIFYSE--QNG-LFYDPYWTDSLFTGFLIYAD-QG-	324
<i>Dipodomys ordii</i> ADIH	229	---NHDIASGSTILALKQDDEVVLQIFYSE--QNG-LFYDPYWTDSLFTGFLIYAD-QG-	280
<i>Cavia porcellus</i> ADIH	229	---NHDVASGSTILALKQGDEVVLQIFYSE--QNG-LFYDPYWTDSLFTGFLIYAD-QD-	280
<i>Bos taurus</i> ADIH	246	---NHDVASGSTILALKQGDEVVLQIFYSE--QNG-LFYDPYWTDSLFTGFLIYAD-QD-	297
<i>Equus caballus</i> ADIH	229	---NHDVASGSTILALKQGDEVVLQIFYSE--QNG-LFYDPYWTDSLFTGFLIYAD-QD-	280
<i>Canis lupus familiaris</i> ADIH	229	---NHDVASGSTILALKQGDEVVLQIFYSE--QNG-LFYDPYWTDSLFTGFLIYAD-QD-	280
<i>Pteropus vampyrus</i> ADIH	229	---NHDVASGSTILALKQGDEVVLQIFYSE--QNG-LFYDPYWTDSLFTGFLIYAD-QD-	280
<i>Loxodonta africana</i> ADIH	229	---NHDVASGSTILALKQGDEVVLQIFYSE--QNG-LFYDPYWTDSLFTGFLIYAD-QD-	280
<i>Homo sapiens</i> ADII	241	---NYDYASNSVVLHLDGDEVYVKL---D---GGKAHGGNNNKYSTFSGFLIYAD----	287
<i>Pongo abelii</i> ADII	241	---NYDYASNSVVLHLDGDEVYVKL---D---GGKAHGGNNNKYSTFSGFLIYAD----	287
<i>Macaca mulatta</i> ADII	241	---NYDYASNSVVLHLDGDEVYVKL---D---GGKAHGGNNNKYSTFSGFLIYAD----	287
<i>Mus musculus</i> Adii	241	---NYDYASNSVVLHLDGDEVYVKL---D---GGKAHGGNNNKYSTFSGFLIYAD----	287
<i>Rattus norvegicus</i> Adii	241	---NYDYASNSVVLHLDGDEVYVKL---D---GGKAHGGNNNKYSTFSGFLIYAD----	287
<i>Bos taurus</i> ADII	241	---NYDYASNSVVLHLDGDEVYVKL---D---GGKAHGGNNNKYSTFSGFLIYAD----	287
<i>Canis lupus familiaris</i> ADII	241	---NYDYASNSVVLHLDGDEVYVKL---D---GGKAHGGNNNKYSTFSGFLIYAD----	287
<i>Dasyopus novemcinctus</i> ADII	241	---NYDYASNSVVLHLDGDEVYVKL---D---GGKAHGGNNNKYSTFSGFLIYAD----	287
<i>Homo sapiens</i> ADIJ	209	---NYDYASNSVVLHLEPGDEVYIKL---D---GGKAHGGNNNKYSTFSGFLIYAD----	255
<i>Pan troglodytes</i> ADIJ	209	---NYDYASNSVVLHLEPGDEVYIKL---D---GGKAHGGNNNKYSTFSGFLIYAD----	255
<i>Papio hamadryas</i> ADIJ	209	---NYDYASNSVVLHLEPGDEVYIKL---D---GGKAHGGNNNKYSTFSGFLIYAD----	255
<i>Mus musculus</i> Adij	209	---NYDYASNSVVLHLEPGDEVYIKL---D---GGKAHGGNNNKYSTFSGFLIYAD----	255
<i>Rattus norvegicus</i> Adij	209	---NYDYASNSVVLHLEPGDEVYIKL---D---GGKAHGGNNNKYSTFSGFLIYAD----	255
<i>Oryctolagus cuniculus</i> ADIJ	209	---NYDYASNSVVLHLEPGDEVYIKL---D---GGKAHGGNNNKYSTFSGFLIYAD----	255
<i>Bos taurus</i> ADIJ	209	---NYDYASNSVVLHLEPGDEVYIKL---D---GGKAHGGNNNKYSTFSGFLIYAD----	255
<i>Canis lupus familiaris</i> ADIJ	209	---NYDYASNSVVLHLEPGDEVYIKL---D---GGKAHGGNNNKYSTFSGFLIYAD----	255
<i>Loxodonta africana</i> ADIJ	209	---NYDYASNSVVLHLEPGDEVYIKL---D---GGKAHGGNNNKYSTFSGFLIYAD----	255
<i>Homo sapiens</i> ADIK	192	---NYDYASNSVILHLDVGDEVFIKL---D---GGKVHGGNTNKYSTFSGFLIYAD----	238
<i>Pan troglodytes</i> ADIK	192	---NYDYASNSVILHLDVGDEVFIKL---D---GGKVHGGNTNKYSTFSGFLIYAD----	238
<i>Gorilla gorilla</i> ADIK	192	---NYDYASNSVILHLDVGDEVFIKL---D---GGKVHGGNTNKYSTFSGFLIYAD----	238
<i>Papio hamadryas</i> ADIK	192	---NYDYASNSVILHLDVGDEVFIKL---D---GGKVHGGNTNKYSTFSGFLIYAD----	238
<i>Callithrix jacchus</i> ADIK	192	---NYDYASNSVILHLDVGDEVFIKL---D---GGKVHGGNTNKYSTFSGFLIYAD----	238
<i>Rattus norvegicus</i> Adik	192	---NYDYASNSVILHLDVGDEVFIKL---D---GGKVHGGNTNKYSTFSGFLIYAD----	238
<i>Cavia porcellus</i> ADIK	192	---NYDYASNSVILHLDVGDEVFIKL---D---GGKVHGGNTNKYSTFSGFLIYAD----	238
<i>Equus caballus</i> ADIK	192	---NYDYASNSVILHLDVGDEVFIKL---D---GGKVHGGNTNKYSTFSGFLIYAD----	238
<i>Canis lupus familiaris</i> ADIK	192	---NYDYASNSVILHLDVGDEVFIKL---D---GGKVHGGNTNKYSTFSGFLIYAD----	238
<i>Dasyopus novemcinctus</i> ADIK	192	---NYDYASNSVILHLDVGDEVFIKL---D---GGKVHGGNTNKYSTFSGFLIYAD----	238
<i>Loxodonta africana</i> ADIK	192	---NYDYASNSVILHLDVGDEVFIKL---D---GGKVHGGNTNKYSTFSGFLIYAD----	238
<i>Mus musculus</i> Adil	212	---NYDYASNSVILHLDAGDEVFIKL---D---GGKAHGGNSNKYSTFSGFLIYSD----	258
<i>Rattus norvegicus</i> Adil	212	---NYDYASNSVILHLDAGDEVFIKL---D---GGKAHGGNSNKYSTFSGFLIYSD----	258
<i>Homo sapiens</i> ADIM	309	--KGKSDTSSNHAVLKLAKGDEVVLRM---G---NGALH-GDHQRFSTFAGFLIF-E-TK-	357
<i>Pan troglodytes</i> ADIM	309	--KGKSDTSSNHAVLKLAKGDEVVLRM---G---NGALH-GDHQRFSTFAGFLIF-E-TK-	357

<i>Pongo abelii</i> ADIM	265	-KGKSDTS	SNHAVLKLAKGDEVVLRM---G---NGALH-GDHQRFSTFAGFLLF-E-TK-	313
<i>Nomascus leucogenys</i> ADIM	309	-KGKSDTS	SNHAVLKLAKGDEVVLRM---G---NGALH-GDHQRFSTFAGFLLF-E-TK-	357
<i>Papio hamadryas</i> ADIM	309	-KGKSDTS	SNHAVLKLAKGDEVVLRM---G---NGALH-GDHQRFSTFAGFLLF-E-TK-	357
<i>Callithrix jacchus</i> ADIM	299	-KGKSDTS	SNHAVLKLAKGDEVVLRM---G---NGALH-GDHQRFSTFAGFLLF-E-TK-	347
<i>Mus musculus</i> Adim	198	-KGKSDTS	SNHAVLKLAKGDEVVLRM---G---NGALH-GDHQRFSTFAGFLLF-E-TK-	246
<i>Rattus norvegicus</i> Adim	272	-KGKSDTS	SNHAVLKLAKGDEVVLRM---G---NGALH-GDHQRFSTFAGFLLF-E-TK-	320
<i>Cavia porcellus</i> ADIM	265	-KGKSDTS	SNHAVLKLAKGDEVVLRM---G---NGALH-GDHQRFSTFAGFLLF-E-TK-	313
<i>Bos taurus</i> ADIM	198	-KGKSDTS	SNHAVLKLAKGDEVVLRM---G---NGALH-GDHQRFSTFAGFLLF-E-TK-	246
<i>Equus caballus</i> ADIM	198	-KGKSDTS	SNHAVLKLAKGDEVVLRM---G---NGALH-GDHQRFSTFAGFLLF-E-TK-	246
<i>Canis lupus familiaris</i> ADIM	259	-KGKSDTS	SNHAVLKLAKGDEVVLRM---G---NGALH-GDHQRFSTFAGFLLF-E-TK-	307
<i>Homo sapiens</i> ADIN	265	--RRREMQS	QSVMLALRRGDVWLLSHDHD---GYGAYSN-HGKYITFSGFLVYPDLAPA	318
<i>Pan troglodytes</i> ADIN	265	--RRREMQS	QSVMLALRRGDVWLLSHDHD---GYGAYSN-HGKYITFSGFLVYPDLAPA	318
<i>Pongo abelii</i> ADIN	265	--RRREMQS	QSVMLALRRGDVWLLSHDHD---GYGAYSN-HGKYITFSGFLVYPDLAPA	318
<i>Nomascus leucogenys</i> ADIN	260	--RRREMQS	QSVMLALRRGDVWLLSHDHD---GYGAYSN-HGKYITFSGFLVYPDLAPA	313
<i>Macaca mulatta</i> ADIN	267	--RRREMQS	QSVMLALRRGDVWLLSHDHD---GYGAYSN-HGKYITFSGFLVYPDLAPA	320
<i>Callithrix jacchus</i> ADIN	265	--RRREMQS	QSVMLALRRGDVWLLSHDHD---GYGAYSN-HGKYITFSGFLVYPDLAPA	318
<i>Mus musculus</i> Adin	263	--RRREMQS	QSVMLPLRRGDVWLLSHDHD---GYGAYSN-HGKYITFSGFLVYPDLAAA	316
<i>Cavia porcellus</i> ADIN	275	--RRREMQS	QSVMLSLRRGDVWLLSHDHD---GYGAYSN-HGKYITFSGFLVYPDLTPD	328
<i>Tursiops truncatus</i> ADIN	261	--RRREMQS	QSVMLALRRGDVWLLSHDHD---GYGAYSN-HGKYITFSGFLVYPDLIPA	314
<i>Canis lupus familiaris</i> ADIN	261	--RRREMQS	QSVMLALRRGDVWLLSHDHD---GYGAYSN-HGKYITFSGFLVYPDLAAT	314
<i>Dasylops novemcinctus</i> ADIN	261	--RRREMQS	QSVMLALRRGDVWLLSHDHD---GYGAYSN-HGKYITFSGFLVYPDLAPA	314
<i>Loxodonta africana</i> ADIN	261	--RRREMQS	SIMLALRQDQVWLLSHDHD---GYGAYSN-HGKYITFSGFLVYPDPA-A	313
<i>Homo sapiens</i> ADIO	199	---RSVMAQ	QSLMILLAAGDAVWVRFQRD---RDNAIYGEHGDLYITFSGHIVKP----A	249
<i>Pan troglodytes</i> ADIO	199	---RSVMAQ	QSLMILLAAGDAVWVRFQRD---RDNAIYGEHGDLYITFSGHIVKP----A	249
<i>Macaca mulatta</i> ADIO	194	---RSVMAQ	QSLMILLAAGDAVWVRFQRE---QDNAYGERGDLYITFSGHIVKP----A	244
<i>Bos taurus</i> ADIO	198	---RSVMAQ	QSLMILLAAGDAVWVRFQRD---RDNAIFGSEGLDYITFSGHIVKP----D	248
<i>Myotis lucifugus</i> ADIO	198	---RSVMQ	TOSLMLPLAAGDTAVWVRFKRD---QDNAYGEHGDLYITFSGHIVKP----A	248
<i>Homo sapiens</i> ADIP	326	---RSIMQS	QSLMLELRQDQVWVRLFKGE---RENAIFSEELDTYITFSGYLVKH----A	376
<i>Otolemur garnettii</i> ADIP	228	---RSIMQS	QSLMLLQREQDEVVWVRLFRGE---RENAIFSDEFDFTYITFSGYLVKH----A	278
<i>Mus musculus</i> Adip	228	---RSIMQS	QSLMMLREDEDEVVWVRLFKGE---RENAIFSDEFDFTYITFSGYLVKP----A	278
<i>Cavia porcellus</i> ADIP	228	---RSIMQS	QSLMLELRQDDEVVWVRLFKGE---RENAIFSDEFDFTYITFSGYLVKH----A	278
<i>Bos taurus</i> ADIP	251	---RSIMQS	QSLMLELRQDDEVVWVRLFKGE---RENAIFSDEFDFTYITFSGYLVKP----A	301
<i>Equus caballus</i> ADIP	226	---RSIMQS	QSLMLELRQDDEVVWVRLFKGE---RENAIFSDEFDFTYITFSGYLVKH----A	276
<i>Loxodonta africana</i> ADIP	280	---RSIMQS	QSLMLELRQDDEVVWVRLFKGE---RENAIFSDEFDFTYITFSGYLVKH----A	330
<i>Homo sapiens</i> ADIQ	226	---RSIMQS	QSVMLDLAYGDRVWVRLFKRQ---RENAIYSNDFDFTYITFSGHILIK-----A	275
<i>Pan troglodytes</i> ADIQ	226	---RSIMQS	QSVMLDLAYGDRVWVRLFKRQ---RENAIYSNDFDFTYITFSGHILIK-----A	275
<i>Pongo abelii</i> ADIQ	226	---RSIMQS	QSVMLDLAYGDRVWVRLFKRQ---RENAIYSNDFDFTYITFSGHILIK-----A	275
<i>Nomascus leucogenys</i> ADIQ	226	---RSIMQS	QSVMLDLAYGDRVWVRLFKRQ---RENAIYSNDFDFTYITFSGHILIK-----A	275
<i>Macaca mulatta</i> ADIQ	226	---RSIMQS	QSVMLDLAYGDRVWVRLFKRQ---RENAIYSNDFDFTYITFSGHILIK-----A	275
<i>Mus musculus</i> Adiq	212	---RSIMQS	QSVMLPLVFGDRVWVRLFKRE---RENGIYSDVDVDTYITFSGHILIK-----A	261
<i>Rattus norvegicus</i> Adiq	211	---RSIMQS	QSVMLPLVFGDYVWVRLFKRE---RENGIYSDMDTYITFSGHILIK-----A	260
<i>Homo sapiens</i> ADIR	113	---DHETAS	NHAILQLFQGDQIWLRLHRGA---IYG--SS-W-KYSTFSGYLLYQD----	158
<i>Pan troglodytes</i> ADIR	113	---DHETAS	NHAILQLFQGDQIWLRLHRGA---IYG--SS-W-KYSTFSGYLLYQD----	158
<i>Pongo abelii</i> ADIR	113	---DHETAS	NHAILQLFQGDQIWLRLHRGA---IYG--SS-W-KYSTFSGYLLYQD----	158
<i>Nomascus leucogenys</i> ADIR	113	---DHETAS	NHAILQLFQGDQIWLRLHRGA---IYG--SS-W-KYSTFSGYLLYQD----	158
<i>Macaca mulatta</i> ADIR	113	---DHETAS	NHAILQLFQGDQIWLRLHRGA---IYG--SS-W-KYSTFSGYLLYQD----	158
<i>Papio hamadryas</i> ADIR	113	---DHETAS	NHAILQLFQGDQIWLRLHRGA---IYG--SS-W-KYSTFSGYLLYQD----	158
<i>Callithrix jacchus</i> ADIR	113	---DHETAS	NHAILQLFQGDQIWLRLHRGA---IYG--SS-W-KYSTFSGYLLYQD----	158
<i>Tarsius syrichta</i> ADIR	113	---DHETAS	NHAILQLFQGDQIWLRLHRGA---IYG--SS-W-KYSTFSGYLLYQD----	158
<i>Otolemur garnettii</i> ADIR	113	---DHETAS	NHAILQLFQGDQIWLRLHRGA---IYG--SS-W-KYSTFSGYLLYQD----	158
<i>Tupaia belangeri</i> ADIR	113	---DHETAS	NHAILQLFQGDQIWLRLHRGA---IYG--SS-W-KYSTFSGYLLYQD----	158
<i>Mus musculus</i> Adir	113	---DHETAS	NHAVLQLLQGDQIWLRLHRGA---IYG--SS-W-KYSTFSGYLLYQD----	158
<i>Rattus norvegicus</i> Adir	113	---DHETAS	NHAVLQLLQGDQIWLRLHRGA---IYG--SS-W-KYSTFSGYLLYQD----	158
<i>Cavia porcellus</i> ADIR	113	---DHETAS	NHAVLQLFQGDQIWLRLHRGA---IYG--SS-W-KYSTFSGYLLYQD----	158
<i>Oryctolagus cuniculus</i> ADIR	113	---DHETAS	NHAVLQLFQGDQIWLRLHRGA---IYG--SS-W-KYSTFSGYLLYQD----	158
<i>Tursiops truncatus</i> ADIR	113	---DHETAS	NHAVLQLFQGDQIWLRLHRGA---IYG--SS-W-KYSTFSGYLLYQD----	158
<i>Bos taurus</i> ADIR	113	---DHETAS	NHAVLQLFQGDQIWLRLHRGA---IYG--SS-W-KYSTFSGYLLYQD----	158
<i>Equus caballus</i> ADIR	113	---DHETAS	NHAVLQLFQGDQIWLRLHRGA---IYG--SS-W-KYSTFSGYLLYQD----	158
<i>Canis lupus familiaris</i> ADIR	113	---DHETAS	NHAVLQLFQGDQIWLRLHRGA---IYG--SS-W-KYSTFSGYLLYQD----	158
<i>Myotis lucifugus</i> ADIR	113	---DHETAS	NHAVLQLFQGDQIWLRLHRGA---IYG--SS-W-KYSTFSGYLLYQD----	158
<i>Pteropus vampyrus</i> ADIR	113	---DHETAS	NHAVLQLFQGDQIWLRLHRGA---IYG--SS-W-KYSTFSGYLLYQD----	158
<i>Erinaceus europaeus</i> ADIR	87	---DHETAS	NHAVLQLCRGDQIWLRLHRGA---IYG--SS-W-KYSTFSGYLLYQD----	132
<i>Dasylops novemcinctus</i> ADIR	113	---DHETAS	NHAVLQLFQGDQIWLRLHRGA---IYG--SS-W-KYSTFSGYLLYQD----	158
<i>Choloepus hoffmanni</i> ADIR	113	---DHETAS	NHAVLQLFQGDQIWLRLHRGA---IYG--SS-W-KYSTFSGYLLYQD----	158
<i>Loxodonta africana</i> ADIR	113	---DHETAS	NHAVLQLFQGDQIWLRLHRGA---IYG--SS-W-KYSTFSGYLLYQD----	158

<i>Homo sapiens</i> ADIA	-	-----&	-
		850	
<i>Homo sapiens</i> ADIA	-	-----&	-
<i>Papio hamadryas</i> ADIA	-	-----&	-
<i>Mus musculus</i> Adia	-	-----&	-
<i>Rattus norvegicus</i> Adia	-	-----&	-
<i>Cavia porcellus</i> ADIA	-	-----&	-
<i>Ochotona princeps</i> ADIA	-	-----&	-
<i>Bos taurus</i> ADIA	-	-----&	-
<i>Equus caballus</i> ADIA	-	-----&	-
<i>Canis lupus familiaris</i> ADIA	-	-----&	-
<i>Felis catus</i> ADIA	-	-----&	-
<i>Myotis lucifugus</i> ADIA	-	-----&	-
<i>Dasyopus novemcinctus</i> ADIA	-	-----&	-
<i>Loxodonta africana</i> ADIA	-	-----&	-
<i>Homo sapiens</i> ADIB	-	-----&	-
<i>Pan troglodytes</i> ADIB	-	-----&	-
<i>Pongo abelii</i> ADIB	-	-----&	-
<i>Nomascus leucogenys</i> ADIB	-	-----&	-
<i>Callithrix jacchus</i> ADIB	-	-----&	-
<i>Otolemur garnettii</i> ADIB	-	-----&	-
<i>Mus musculus</i> Adib	-	-----&	-
<i>Rattus norvegicus</i> Adib	-	-----&	-
<i>Cavia porcellus</i> ADIB	-	-----&	-
<i>Oryctolagus cuniculus</i> ADIB	-	-----&	-
<i>Bos taurus</i> ADIB	-	-----&	-
<i>Equus caballus</i> ADIB	-	-----&	-
<i>Canis lupus familiaris</i> ADIB	-	-----&	-
<i>Myotis lucifugus</i> ADIB	-	-----&	-
<i>Loxodonta africana</i> ADIB	-	-----&	-
<i>Homo sapiens</i> ADIC	-	-----&	-
<i>Macaca mulatta</i> ADIC	-	-----&	-
<i>Papio hamadryas</i> ADIC	-	-----&	-
<i>Callithrix jacchus</i> ADIC	-	-----&	-
<i>Mus musculus</i> Adic	-	-----&	-
<i>Rattus norvegicus</i> Adic	-	-----&	-
<i>Cavia porcellus</i> ADIC	-	-----&	-
<i>Oryctolagus cuniculus</i> ADIC	-	-----&	-
<i>Equus caballus</i> ADIC	-	-----&	-
<i>Canis lupus familiaris</i> ADIC	-	-----&	-
<i>Myotis lucifugus</i> ADIC	-	-----&	-
<i>Loxodonta africana</i> ADIC	-	-----&	-
<i>Homo sapiens</i> ADID	-	-----&	-
<i>Pan troglodytes</i> ADID	-	-----&	-
<i>Pongo abelii</i> ADID	-	-----&	-
<i>Nomascus leucogenys</i> ADID	-	-----&	-
<i>Macaca mulatta</i> ADID	-	-----&	-
<i>Otolemur garnettii</i> ADID	-	-----&	-
<i>Mus musculus</i> Adid	-	-----&	-
<i>Rattus norvegicus</i> Adid	-	-----&	-
<i>Cavia porcellus</i> ADID	289	S-----&	289
<i>Oryctolagus cuniculus</i> ADID	-	-----&	-
<i>Bos taurus</i> ADID	-	-----&	-
<i>Equus caballus</i> ADID	-	-----&	-
<i>Canis lupus familiaris</i> ADID	-	-----&	-
<i>Felis catus</i> ADID	-	-----&	-
<i>Myotis lucifugus</i> ADID	-	-----&	-
<i>Dasyopus novemcinctus</i> ADID	-	-----&	-
<i>Loxodonta africana</i> ADID	-	-----&	-
<i>Homo sapiens</i> ADIE	239	-SPVF----A-&	243
<i>Pan troglodytes</i> ADIE	239	-SPVF----A-&	243
<i>Pongo abelii</i> ADIE	239	-SPVF----A-&	243
<i>Papio hamadryas</i> ADIE	239	-SPVF----A-&	243
<i>Callithrix jacchus</i> ADIE	239	-SPVF----A-&	243
<i>Otolemur garnettii</i> ADIE	239	-SPVF----A-&	243
<i>Mus musculus</i> Adie	239	-SPVF----A-&	243
<i>Rattus norvegicus</i> Adie	239	-SPVF----A-&	243
<i>Homo sapiens</i> ADIF1	-	-----&	-
<i>Homo sapiens</i> ADIF2	-	-----&	-
<i>Pan troglodytes</i> ADIF1	-	-----&	-
<i>Pongo abelii</i> ADIF1	-	-----&	-
<i>Nomascus leucogenys</i> ADIF1	-	-----&	-
<i>Macaca mulatta</i> ADIF1	-	-----&	-
<i>Papio hamadryas</i> ADIF1	-	-----&	-

<i>Microcebus murinus</i> ADIF1	-	-----&	-
<i>Otolemur garnettii</i> ADIF1	-	-----&	-
<i>Mus musculus</i> Adif1	-	-----&	-
<i>Rattus norvegicus</i> Adif1	-	-----&	-
<i>Cavia porcellus</i> ADIF1	-	-----&	-
<i>Oryctolagus cuniculus</i> ADIF1	-	-----&	-
<i>Ochotona princeps</i> ADIF1	-	-----&	-
<i>Bos taurus</i> ADIF1	-	-----&	-
<i>Equus caballus</i> ADIF1	-	-----&	-
<i>Canis lupus familiaris</i> ADIF1	-	-----&	-
<i>Felis catus</i> ADIF1	-	-----&	-
<i>Dasyopus novemcinctus</i> ADIF1	-	-----&	-
<i>Loxodonta africana</i> ADIF1	-	-----&	-
<i>Homo sapiens</i> ADIG	334	LDSISEDDEL-&	343
<i>Pan troglodytes</i> ADIG	334	LDSISEDDEL-&	343
<i>Pongo abelii</i> ADIG	334	LDSISEDDEL-&	343
<i>Callithrix jacchus</i> ADIG	320	LDSISEDDEL-&	329
<i>Otolemur garnettii</i> ADIG	280	LDSISEDDEL-&	289
<i>Mus musculus</i> Adig	322	LDSISEDDEL-&	331
<i>Rattus norvegicus</i> Adig	323	LDSISEDDEL-&	332
<i>Cavia porcellus</i> ADIG	280	LDAISEDDEL-&	289
<i>Oryctolagus cuniculus</i> ADIG	280	LDSISEDDEL-&	289
<i>Tursiops truncatus</i> ADIG	332	LDSISEDDEL-&	341
<i>Bos taurus</i> ADIG	280	LDSISEDDEL-&	289
<i>Equus caballus</i> ADIG	321	LDSISEDDEL-&	330
<i>Canis lupus familiaris</i> ADIG	321	LDSISEDDEL-&	330
<i>Myotis lucifugus</i> ADIG	280	LDSISEDDEL-&	289
<i>Homo sapiens</i> ADIH	281	-DP-N---EV-&	285
<i>Pan troglodytes</i> ADIH	281	-DP-N---EV-&	285
<i>Pongo abelii</i> ADIH	281	-DP-N---EI-&	285
<i>Nomascus leucogenys</i> ADIH	281	-DP-N---EV-&	285
<i>Macaca mulatta</i> ADIH	281	-DP-N---EV-&	285
<i>Papio hamadryas</i> ADIH	281	-DP-N---EV-&	285
<i>Mus musculus</i> Adih	288	-DP-N---EV-&	292
<i>Rattus norvegicus</i> Adih	325	-DP-N---EV-&	329
<i>Dipodomys ordii</i> ADIH	281	-GP-N---EV-&	285
<i>Cavia porcellus</i> ADIH	281	-NP-N---EL-&	285
<i>Bos taurus</i> ADIH	298	-NP-S---EV-&	302
<i>Equus caballus</i> ADIH	281	-NP-N---EL-&	285
<i>Canis lupus familiaris</i> ADIH	281	-NP-N---EV-&	285
<i>Pteropus vampyrus</i> ADIH	281	-DP-N---EV-&	285
<i>Loxodonta africana</i> ADIH	281	-DP-N---EV-&	285
<i>Homo sapiens</i> ADII	-	-----&	-
<i>Pongo abelii</i> ADII	-	-----&	-
<i>Macaca mulatta</i> ADII	-	-----&	-
<i>Mus musculus</i> Adii	-	-----&	-
<i>Rattus norvegicus</i> Adii	-	-----&	-
<i>Bos taurus</i> ADII	-	-----&	-
<i>Canis lupus familiaris</i> ADII	-	-----&	-
<i>Dasyopus novemcinctus</i> ADII	-	-----&	-
<i>Homo sapiens</i> ADIJ	-	-----&	-
<i>Pan troglodytes</i> ADIJ	-	-----&	-
<i>Papio hamadryas</i> ADIJ	-	-----&	-
<i>Mus musculus</i> Adij	-	-----&	-
<i>Rattus norvegicus</i> Adij	-	-----&	-
<i>Oryctolagus cuniculus</i> ADIJ	-	-----&	-
<i>Bos taurus</i> ADIJ	-	-----&	-
<i>Canis lupus familiaris</i> ADIJ	-	-----&	-
<i>Loxodonta africana</i> ADIJ	-	-----&	-
<i>Homo sapiens</i> ADIK	-	-----&	-
<i>Pan troglodytes</i> ADIK	-	-----&	-
<i>Gorilla gorilla</i> ADIK	-	-----&	-
<i>Papio hamadryas</i> ADIK	-	-----&	-
<i>Callithrix jacchus</i> ADIK	-	-----&	-
<i>Rattus norvegicus</i> Adik	-	-----&	-
<i>Cavia porcellus</i> ADIK	-	-----&	-
<i>Equus caballus</i> ADIK	-	-----&	-
<i>Canis lupus familiaris</i> ADIK	-	-----&	-
<i>Dasyopus novemcinctus</i> ADIK	-	-----&	-
<i>Loxodonta africana</i> ADIK	-	-----&	-
<i>Mus musculus</i> Adil	-	-----&	-
<i>Rattus norvegicus</i> Adil	-	-----&	-
<i>Homo sapiens</i> ADIM	-	-----&	-
<i>Pan troglodytes</i> ADIM	-	-----&	-

<i>Pongo abelii</i> ADIM	-	-----&	-
<i>Nomascus leucogenys</i> ADIM	-	-----&	-
<i>Papio hamadryas</i> ADIM	-	-----&	-
<i>Callithrix jacchus</i> ADIM	-	-----&	-
<i>Mus musculus</i> Adim	-	-----&	-
<i>Rattus norvegicus</i> Adim	-	-----&	-
<i>Cavia porcellus</i> ADIM	-	-----&	-
<i>Bos taurus</i> ADIM	-	-----&	-
<i>Equus caballus</i> ADIM	-	-----&	-
<i>Canis lupus familiaris</i> ADIM	-	-----&	-
<i>Homo sapiens</i> ADIN	319	APPGLGASELL&	329
<i>Pan troglodytes</i> ADIN	319	APPGLGASELL&	329
<i>Pongo abelii</i> ADIN	319	APPGLGASELL&	329
<i>Nomascus leucogenys</i> ADIN	314	APPGLEASELL&	324
<i>Macaca mulatta</i> ADIN	321	APPGLGAPELL&	331
<i>Callithrix jacchus</i> ADIN	319	GPPGLGARELL&	329
<i>Mus musculus</i> Adin	317	GPPALKPPE-L&	326
<i>Cavia porcellus</i> ADIN	329	GDP-----E-L&	333
<i>Tursiops truncatus</i> ADIN	315	GPPGLGPPE-L&	324
<i>Canis lupus familiaris</i> ADIN	315	GPPGLGPPE-L&	324
<i>Dasyops novemcinctus</i> ADIN	315	GLPGLGPAE-L&	324
<i>Loxodonta africana</i> ADIN	314	HPPGLGPPE-L&	323
<i>Homo sapiens</i> ADIO	250	A-----EL-&	252
<i>Pan troglodytes</i> ADIO	250	A-----EL-&	252
<i>Macaca mulatta</i> ADIO	245	A-----EL-&	247
<i>Bos taurus</i> ADIO	249	A-----EL-&	251
<i>Myotis lucifugus</i> ADIO	249	A-----EL-&	251
<i>Homo sapiens</i> ADIP	377	T-----EP-&	379
<i>Otolemur garnettii</i> ADIP	279	A-----EP-&	281
<i>Mus musculus</i> Adip	279	S-----EP-&	281
<i>Cavia porcellus</i> ADIP	279	A-----EP-&	281
<i>Bos taurus</i> ADIP	302	N-----EP-&	304
<i>Equus caballus</i> ADIP	277	A-----EP-&	279
<i>Loxodonta africana</i> ADIP	331	A-----EP-&	333
<i>Homo sapiens</i> ADIQ	276	E-----DD-&	278
<i>Pan troglodytes</i> ADIQ	276	E-----DD-&	278
<i>Pongo abelii</i> ADIQ	276	E-----DD-&	278
<i>Nomascus leucogenys</i> ADIQ	276	E-----DD-&	278
<i>Macaca mulatta</i> ADIQ	276	E-----DD-&	278
<i>Mus musculus</i> Adiq	262	E-----DN-&	264
<i>Rattus norvegicus</i> Adiq	261	E-----DN-&	263
<i>Homo sapiens</i> ADIR	-	-----&	-
<i>Pan troglodytes</i> ADIR	-	-----&	-
<i>Pongo abelii</i> ADIR	-	-----&	-
<i>Nomascus leucogenys</i> ADIR	-	-----&	-
<i>Macaca mulatta</i> ADIR	-	-----&	-
<i>Papio hamadryas</i> ADIR	-	-----&	-
<i>Callithrix jacchus</i> ADIR	-	-----&	-
<i>Tarsius syrichta</i> ADIR	-	-----&	-
<i>Otolemur garnettii</i> ADIR	-	-----&	-
<i>Tupaia belangeri</i> ADIR	-	-----&	-
<i>Mus musculus</i> Adir	-	-----&	-
<i>Rattus norvegicus</i> Adir	-	-----&	-
<i>Cavia porcellus</i> ADIR	-	-----&	-
<i>Oryctolagus cuniculus</i> ADIR	-	-----&	-
<i>Tursiops truncatus</i> ADIR	-	-----&	-
<i>Bos taurus</i> ADIR	-	-----&	-
<i>Equus caballus</i> ADIR	-	-----&	-
<i>Canis lupus familiaris</i> ADIR	-	-----&	-
<i>Myotis lucifugus</i> ADIR	-	-----&	-
<i>Pteropus vampyrus</i> ADIR	-	-----&	-
<i>Erinaceus europaeus</i> ADIR	-	-----&	-
<i>Dasyops novemcinctus</i> ADIR	-	-----&	-
<i>Choloepus hoffmanni</i> ADIR	-	-----&	-
<i>Loxodonta africana</i> ADIR	-	-----&	-