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1
Homo_sapiens_1      --MESGFTSK DTYLSHFNPR DYLEKYYKFG SRHSAESQIL
Erinaceus_europaeus_1 --MEPRFTSK DTYLSHFNPQ AYLEKYYTFG ACHSAENQIL
Pteropus_alecto_1   --MESGFTSK DTYLSHFNPR DYLENYYSFSG SSDSAENQVL
Pteropus_vampyrus_1 --MESGFTSK DTYLSHFNPR DYLENYYSFSG SSDSAENQVL
Chrysochloris_asiatica_1 --MESGFTTK DTYLRHFNPR DYLEKYYSFSA SRQSAENQIV
Loxodonta_africana_1 --MEFGFTTK DTYLSHFNPQ DYLEKYYNFG SKHSAENQIV
Otolemur_garnettii_1 --MGSGFTSK DTYLTHFNPR DYLEKYYNFG SRHSAENQIL
Eptesicus_fuscus_1  --MESGFTSK DTYLSHFNPR DYLEKYYSFSG STHSAENQVL
Myotis_davidii_1    --MESGFTSK DTYLSHFNPQ DYLEKYYSFSG STQSAENQIL
Myotis_brandtii_1   --MESGFTSK DTYLSHFNPR DYLEKYYSFSG STQSAENQIL
Myotis_lucifugus_1  --MESGFTSK DTYLSHFNPR DYLEKYYSFSG STQSAENQIL
Tarsius_syrichta_1  --MGSGFTSK DMYLSHFNPR DYLEKYYNFG SRCSAENQIL
Tupaia_chinensis_1 --MEPGFTSK DTYLSHFNPR DYLEKYYNFG SRHSAENQIL
Propithecus_coquereli_1 --MESGFTSK DTYLSHFNPR DYLEKYYSFSG SRHTAENQIL
Microcebus_murinus_1 --MESGFTSK DTYLSHFNPR DYLEKYYSFSG SRHTAENQIL
Acinonyx_jubatus_1  --MESTFTSK DTYLRHFNPR DYLEKYYNFG SRHSAENEIL
Panthera_tigris_altaica_1 --MESTFTSK DTYLRHFNPR DYLEKYYNFG SRHSAENEIL
Mustela_putorius_furo_1 --METSFTSK DTYLRHFNPR DYLEKYYNFG SKHSAENEIL
Canis_lupus_familiaris_1 --MESSFTSK DTYLRHFNPR DYLEKYYNFG TRHSAENEIL
Leptonychotes_weddellii_1 --MEPSFTSK DTYLRHFNPR DYLEKYYNFG SRHSAENEIL
Ailuropoda_melanoleuca_1 --MEPSFTSK DTYLRHFNPR DYLEKYYNFG SRHSAENEIL
Ursus_maritimus_1   --MEPSFTSK DTYLRHFNPR DYLEKYYNFG SRHSAENEIL
Nomascus_leucogenys_1 --MESGFTSK DTYLSHFNPR DYLEKYYKFG SRHSAESQIL
Pongo_abelii_1      --MESGFTSK DTYLSHFNPR DYLEKYYKFG SRHSAESQIL
Pan_paniscus_1      --MESGFTSK DTYLSHFNPR DYLEKYYKFG SRHSAESQIL
Gorilla_gorilla_gorilla_1 --MESGFTSK DTYLSHFNPR DYLEKYYKFG SRHSAESQIL
Pan_troglodytes_1   --MESGFTSK DTYLSHFNPR DYLEKYYKFG SRHSAESQIL
Mandrillus_leucophaeus_1 --MESGFTSK DAYLRHFNPR DYLEKYYKFG SRHSAESQIL
Chlorocebus_sabaeus_1 --MESGFTSK DTYLRHFNPR DYLEKYYKFG SRHSAESQIL
Cercocebus_atys_1   --MESGFTSK DTYLRHFNPR DYLEKYYKFA SRHSAESQIL
Rhinopithecus_roxellana_1 --MESGFTSK DTYLRHFNPR DYLEKYYKFG SRHSAESQIL
Papio_anubis_1      --MESGFTSK DTYLRHFNPR DYLEKYYQFG SRHSAESQIL
Macaca_fascicularis_1 --MESGFTSK DTYLRHFNPR DYLEKYYKFG SRHSAESQIL
Macaca_mulatta_1    --MESGFTSK DTYLRHFNPR DYLEKYYKFG SRHSAESQIL
Macaca_nemestrina_1 --MESGFTSK DTYLRHFNPR DYLEKYYKFG SRHSAESQIL
Colobus_angolensis_palliatus_1 --MESGFTSK DTYLRHFNPR DYLEKYYKFG SRHSAESQIL
Saimiri_boliviensis_boliviensis_1 --MESGFTSK DTYLSHFNPR DYLEKYYKFG SRYSAESQIL
Callithrix_jacchus_1 --MESGFTSK DTYLSHFNPR DYLEKYYKFG SRNSAESQIL
Ceratotherium_simum_simum_1 --MESGFTSK DTYLSHFNPR DYLEKYYNFG SSHSAENKIL
Orcinus_orca_1      --MESGFTSK DTYLSHFNPQ AYLEKYYSFSG SRHSAEKQIL
Tursiops_truncatus_1 --MESGFTSK DTYLSHFNPQ AYLEKYYSFSG SRHSAEKQIL
Lipotes_vexillifer_1 --MHSGFTSK DTYLSHFNPQ AYLEKYYNFG SRHSAEKQIL
Physeter_catodon_1  --MESGFTSK DTYLSHFNPQ AYLEKYYNFG SRHSAEKQIL
Balaenoptera_acutorostrata_scammoni_1 --MESGFTSK DTYLSHFNPQ AYLEKYYNFG SRHSAEKQIL
Nannospalax_galili_1 --MESGFTSK DTYLSHFNPR DYLENYYSFSG SRHCAENEIL
Cricetulus_griseus_1 --MESGFTSK DTYLSHFNPR DYLEKYYSFSG SRHCAENEIL
Microtus_ochrogaster_1 --MESGFTSK DTYLNHFNPR DYLEKYYSFSG SRHCAENVIL
Mesocricetus_auratus_1 --MESGFTSK DTYLSHFNPR DYLEKYYSFSG SRHCAESEIL
Peromyscus_maniculatus_bairdii_1 --MESGFTSK DTYLSHFNPR DYLEKYYSFSG SRHCAESVIL
Mus_musculus_1      --MESGFTSK DTYLSHFNPR DYLEKYYSFSG SRHCAENEIL
Rattus_norvegicus_1 --MESGFTSK DTYLSHFNPR DYLEKYYSFSG SRHCAENEIL
Jaculus_jaculus_1   --MESGFTSK DTYLRHFNPR DYLEKYYNFG SRPSAENEVL
Marmota_marmota_marmota_1 --MESGFTSK DEYLRHFNPR DYLEKYYNFG SRPSAENQIL
Ictidomys_tridecemlineatus_1 --MESGFTSK DEYLRHFNPR DYLEKYYNFG SKPSAENQIL
Monodelphis_domestica_1 --MGESNFTSK DVYLSHFNPQ SYLEKYYTFG PSPTAEKQIL
Sarcophilus_harrisii_1 --MVEAEFTAK DAYLSHFSPQ TYLEKYYTFG PSPSPENQIL
Ornithorhynchus_anatinus_1 --MESGFMGR DAYEKHFNPR EYLERYYSFSG SNGSAENIIL
Pterocles_gutturalis_1 MQAPAVFTGV DVYQRSFNPR EYLKEFYTLS DSEGRPNAFL
Acanthisitta_chloris_1 MEAPAIFTEA EVYEQSFDSQ AYLNEYYSMS DKQKGANAFI
Manacus_vitellinus_1 MDAPAIFTEA DFYQONFDPO AYLKEYYSMS DSREGANVFL
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|---------------------------------------|------------|------------|------------|------------|
| Homo_sapiens_1 | KHLLKNLFKI | FCLDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Erinaceus_europaeus_1 | QHLLKSLFKI | FCVDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Pteropus_alecto_1 | RLLLNLFKI | FCLDGVNGD | LIDIGSGPTI | YQLLSACESF |
| Pteropus_vampyrus_1 | RLLLNLFKI | FCLDGVNGD | LIDIGSGPTI | YQLLSACESF |
| Chrysochloris_asiatica_1 | RHLLNLFKI | FCVDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Loxodonta_africana_1 | RHLLNLFKI | FCLGGVKGD | LIDIGSGPTI | YQLLSACESF |
| Otolemur_garnettii_1 | RHLLKNLFKI | FCLDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Eptesicus_fuscus_1 | RLLKKLFNI | FCVAGVKGD | LIDIGSGPTI | YQLLSACESF |
| Myotis_davidii_1 | RLLKKLFNI | FCVAGVKGD | LIDIGSGPTI | YQLLSACESF |
| Myotis_brandtii_1 | RLLKKLFNI | FCVAGVKGD | LIDIGSGPTI | YQLLSACESF |
| Myotis_lucifugus_1 | RLLKKLFNI | FCVAGVKGD | LIDIGSGPTI | YQLLSACESF |
| Tarsius_syrichta_1 | RRLLKSLFKI | FCLDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Tupaia_chinensis_1 | RHLLKNLFKI | FCIDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Propithecus_coquereli_1 | KHLLKNLFRI | FCLDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Microcebus_murinus_1 | RHLLKNLFKI | FCLDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Acinonyx_jubatus_1 | RHLLKNLFKI | FCLDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Panthera_tigris_altaica_1 | RHLLKNLFKI | FCLDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Mustela_putorius_furo_1 | RHLLKNLFKI | FCLDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Canis_lupus_familiaris_1 | RHLLKNLFKI | FCLDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Leptonychotes_weddellii_1 | RHLLKNLFKI | FCLDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Ailuropoda_melanoleuca_1 | RHLLKNLFKI | FCLDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Ursus_maritimus_1 | RHLLKNLFKI | FCLDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Nomascus_leucogenys_1 | KHLLNLFKI | FCLDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Pongo_abelii_1 | KHLLKNLFKI | FCLDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Pan_paniscus_1 | KHLLKNLFKI | FCLDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Gorilla_gorilla_gorilla_1 | KHLLKNLFKI | FCLDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Pan_troglodytes_1 | KHLLKNLFKI | FCLDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Mandrillus_leucophaeus_1 | KHLLNLFKI | FCLDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Chlorocebus_sabaeus_1 | KHLLNLFKI | FCLDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Cercocebus_atys_1 | KHLLNLFKI | FCLDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Rhinopithecus_roxellana_1 | KHLLKNLFKI | FCLDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Papio_anubis_1 | KHLLNLFKI | FCLDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Macaca_fascicularis_1 | KHLLNLFKI | FCLDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Macaca_mulatta_1 | KHLLNLFKI | FCLDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Macaca_nemestrina_1 | KHLLNLFKI | FCLDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Colobus_angolensis_palliatu_1 | KHLLKNLFKI | FCLDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Saimiri_boliviensis_boliviensis_1 | KHLLKNLFKI | FYLDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Callithrix_jacchus_1 | KHLLKNLFKI | FYLDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Ceratotherium_simum_simum_1 | RHLLKNLFKI | FCLDGLKGD | LIDIGSGPTI | YQLLSACESF |
| Orcinus_orca_1 | RHLLKNLFKI | FCLDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Tursiops_truncatus_1 | RHLLKNLFKI | FCLDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Lipotes_vexillifer_1 | RHLLKNLFKI | FCLDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Physeter_catodon_1 | RHLLKNLFKI | FCLDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Balaenoptera_acutorostrata_scammoni_1 | RHLLKNLFKI | FCLDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Nannospalax_galili_1 | KHLLKSLFKI | FCLGGVKGD | LIDIGSGPTI | YQLLSACESF |
| Cricetulus_griseus_1 | RHLLNLFKI | FCLGGVKGD | LIDIGSGPTI | YQLLSACESF |
| Microtus_ochrogaster_1 | RHLLNLFKI | FCLGGVKGD | LIDIGSGPTI | YQLLSACESF |
| Mesocricetus_auratus_1 | RHLLNLFKI | FCLGGVKGD | LIDIGSGPTI | YQLLSACESF |
| Peromyscus_maniculatus_bairdii_1 | RHLLNLFKI | FCLGGVKGD | LIDIGSGPTI | YQLLSACESF |
| Mus_musculus_1 | RHLLKNLFKI | FCLGAVKGEL | LIDIGSGPTI | YQLLSACESF |
| Rattus_norvegicus_1 | RHLLKNLFKI | FCLDGVKGD | LIDIGSGPTI | YQLLSACESF |
| Jaculus_jaculus_1 | RYLLQNLFKI | FCLGGVKGD | LIDIGSGPTI | YQLLSACESF |
| Marmota_marmota_marmota_1 | KHLLKNLFKI | FCLGGVKGD | LIDIGSGPTI | YQLLSACESF |
| Ictidomys_tridecemlineatus_1 | KHLLKNLFKI | FCLGGVKGD | LIDIGSGPTI | YQLLSACESF |
| Monodelphis_domestica_1 | MHLLRRLAKT | FSSGRVKGD | LIDIGTGPTI | YQLLSACESF |
| Sarcophilus_harrisii_1 | MHVLRRLFMT | FSSGRVKGD | LIDIGTGPTI | YQLLSACESF |
| Ornithorhynchus_anatinus_1 | THLLQKLYKT | FCLGGLKGD | LIDIGSGPTI | YQLLSACEAF |
| Pterocles_gutturalis_1 | IQNLRSLFTM | FSLDGLRGDT | LIDVCGPTI | YQLLSACERF |
| Acanthisitta_chloris_1 | MQNLRSLYKM | FSLDGLRGDT | LIDVCGPTI | YQLLSACERF |
| Manacus_vitellinus_1 | TQNLKSLHKM | FSLDELGGT | LIDVCGPTI | YQLLSACERF |

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|---------------------------------------|------------|-------------|------------|-------------|
| Homo_sapiens_1 | KEIVVTDYSD | QNLQELEKWL | KKEPEAFDWS | PVVITYVCDLE |
| Erinaceus_europaeus_1 | KEIIATDYTD | QNLLELQKWL | RKEPGAFDWS | PVVAYVCELE |
| Pteropus_alecto_1 | KEIIATDYID | QNLQELEKWL | KKEPGAFSWS | LVMTYVCELE |
| Pteropus_vampyrus_1 | KEIIATDYID | QNLRELEKWL | KKEPGAFSWS | LVMTYVCELE |
| Chrysochloris_asiatica_1 | KEIIASDYTD | QNLKELERWL | KKEPGAFDWS | PVVNYVCDLE |
| Loxodonta_africana_1 | KEIIASDYVD | QNLQELERWL | KKEPGAFDWS | PVVNYVCDLE |
| Otolemur_garnettii_1 | KEIIVTDYTD | QNLQELQKWL | KKEPEAFDWS | PVVITYVCDLE |
| Eptesicus_fuscus_1 | KTIIATDYTD | QNLQELEKWL | KKEPGAFDWS | PVVITYVCELE |
| Myotis_davidii_1 | KTIIATDYTD | QNLQELEKWL | KKEPGAFDWS | PVVITYVCELE |
| Myotis_brandtii_1 | KTIIATDYTD | QNLQELEKWL | KKEPGAFDWS | PVVITYVCELE |
| Myotis_lucifugus_1 | KTIIATDYTD | QNLQELEKWL | KKEPGAFDWS | PVVITYVCELE |
| Tarsius_syrichta_1 | KEIVATDYTD | QNLQELEKWL | KKEPEAFDWS | PVVITYVCDLE |
| Tupaia_chinensis_1 | KEIIATDYTD | QNLRELEKWL | KKEPGAFDWS | PVVITYVCDLE |
| Propithecus_coquereli_1 | KEIIVSDYTD | QNLQELEKWL | KKEPEAFDWS | PVVITYVCDLE |
| Microcebus_murinus_1 | KEIIVSDYTD | QNLQELEKWL | KKEPEAFDWS | PVVITYVCDLE |
| Acinonyx_jubatus_1 | KEIVVTDYTE | QNLQELQKWL | KKEPGAFDWS | PVVITYVCELE |
| Panthera_tigris_altaica_1 | KEIIVTDYTE | QNLQELQKWL | KKEPGAFDWS | PVVITYVCELE |
| Mustela_putorius_furo_1 | KEIIATDYTD | QNLRELQKWL | KKEPGAFDWS | PVVITYVCELE |
| Canis_lupus_familiaris_1 | KEIIATDYTD | QNLQELQKWL | KKEPGAFDWS | PVVITYVCELE |
| Leptonychotes_weddellii_1 | KEIIATDYTD | QNLQELQKWL | KKEPGAFDWS | PVVITYVCELE |
| Ailuropoda_melanoleuca_1 | KEIIATDYTD | QNLQELEKWL | KKEPGAFDWS | PVVITYVCELE |
| Ursus_maritimus_1 | KEIIATDYTD | QNLQELEKWL | KKEPGAFDWS | PVVITYVCELE |
| Nomascus_leucogenys_1 | KEIIVTDYSD | QNLQELEKWL | RKEPEAFDWS | PVVITYVCDLE |
| Pongo_abelii_1 | KEIVVTDYSD | RNLQELEKWL | RKEPEAFDWS | PVVITYVCDLE |
| Pan_paniscus_1 | KEIVVTDYSD | QNLQELEKWL | KKEPEAFDWS | PVVITYVCDLE |
| Gorilla_gorilla_gorilla_1 | KEIVVTDYSD | QNLQELEKWL | KKEPEAFDWS | PVVITYVCDLE |
| Pan_troglodytes_1 | KEIVVTDYSD | QNLQELEKWL | KKEPEAFDWS | PVVITYVCDLE |
| Mandrillus_leucophaeus_1 | KEIIVTDYSD | QNLQELEKWL | KKEPEAFDWS | PVVITYVCDLE |
| Chlorocebus_sabaeus_1 | KEIIVTDYSE | QNLQELEKWL | KKEPEAFDWS | PVVITYVCDLE |
| Cercocebus_atys_1 | KEIIVTDYSD | QNLQELEKWL | KKEPEAFDWS | PVVITYVCDLE |
| Rhinopithecus_roxellana_1 | KEIIVTDYSD | QNLQELKKWL | KKEPEAFDWS | PVVITYVCDLE |
| Papio_anubis_1 | KEIIVTDYSD | QNLQELEKWL | KKEPEAFDWS | PVVITYVCDLE |
| Macaca_fascicularis_1 | KEIIVTDYSD | QNLQELEKWL | KKEPEAFDWS | PVVITYVCDLE |
| Macaca_mulatta_1 | KEIIVTDYSD | QNLQELEKWL | KKEPEAFDWS | PVVITYVCDLE |
| Macaca_nemestrina_1 | KEIIVTDYSD | QNLQELEKWL | KKEPEAFDWS | PVVITYVCDLE |
| Colobus_angolensis_palliatu_1 | KEIIVTDYSD | QNLQELEKWL | KKEPEAFDWS | PVVITYVCDLE |
| Saimiri_boliviensis_boliviensis_1 | KEIIVTDYSD | QNLQELEKWL | KKEPEAFDWS | PVVITYVCDLE |
| Callithrix_jacchus_1 | KEIIVTDYSD | QNLQELEKWL | KKEPEAFDWS | PVVITYVCDLE |
| Ceratotherium_simum_simum_1 | KEIIATDYTD | QNLQELEKWL | KKEPGAFDWS | PVVITYVCELE |
| Orcinus_orca_1 | KEIIATDYTD | QNLRELEKWL | KKEPGAFDWS | AVVITYVCELE |
| Tursiops_truncatus_1 | KEIIATDYTD | QNLRELEKWL | KKEPGAFDWS | PVVAYVCELE |
| Lipotes_vexillifer_1 | KEIIATDYTD | QNLQELEKWL | KKEPGAFDWS | PVVITYVCELE |
| Physeter_catodon_1 | KEIIATDYTD | QNLQELEKWL | KKEPGAFDWS | PVVITYVCELE |
| Balaenoptera_acutorostrata_scammoni_1 | KEIIATDYTD | RNLQELEKWL | KKEPGAFDWS | PVVITYVCELE |
| Nannospalax_galili_1 | REIIATDYTD | QNLQELQKWL | KKEPGAFDWS | PVVITYVCDLE |
| Cricetulus_griseus_1 | KEIIVSDYTD | QNLWELQKWL | KKEPGAFDWS | PVVITYVCDLE |
| Microtus_ochrogaster_1 | KEIIVSDYTD | QNLRELQKWL | KKEPGAFDWS | PVVITYVCDLE |
| Mesocricetus_auratus_1 | KEIIVSDYTD | QNLRELQKWL | KKEPGAFDWS | PVVITYVCDLE |
| Peromyscus_maniculatus_bairdii_1 | KEIIVSDYTD | QNLRELQKWL | KKEPGAFDWS | PVVITYVCDLE |
| Mus_musculus_1 | TEIIVSDYTD | QNLWELQKWL | KKEPGAFDWS | PVVITYVCDLE |
| Rattus_norvegicus_1 | TEIIVTDYTD | QNLWELQKWL | KKEPGAFDWS | PVVITYVCDLE |
| Jaculus_jaculus_1 | KEIIATDYTD | QNLQELQKWL | KKEPGAFDWS | PVVITYVCDLE |
| Marmota_marmota_marmota_1 | KEIIATDYTD | QNLQELEKWL | RREPGAFDWS | PVVITYVCDLE |
| Ictidomys_tridecemlineatus_1 | KEIIATDYTD | QNLQELEKWL | RKEPGAFDWS | PVVITYVCDLE |
| Monodelphis_domestica_1 | KEIVVTDYTD | QNLLEVSKWL | KKEPGAFDWS | PVVKYVCELE |
| Sarcophilus_harrisii_1 | KEIVATDYTD | QNLLEELNRWL | KKEPGAFDWS | PVVKYVCELE |
| Ornithorhynchus_anatinus_1 | REIVATDYTA | QNRQELQKWL | SKEPGAFDWS | PVVKYVCDLE |
| Pterocles_gutturalis_1 | QEIIALDYTD | QNRRELEKWL | KNEAGAFDWR | PVVKYVCELE |
| Acanthisitta_chloris_1 | QEIIALDYTE | RNRQELEKWL | KNEAGAFDWG | PVVKYVCELE |
| Manacus_vitellinus_1 | QEIIALDYTD | QNRRELERWL | RNEAGAFDWV | PVVKYVCELE |

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|---------------------------------------|-------------|-------------|------------|------------|
| Homo_sapiens_1 | GNRVKGPEKE | EKLRRQAVKQV | LKCDVTQSQP | LGAVPLPPAD |
| Erinaceus_europaeus_1 | GNRIRGPEKE | EKLRRQAVTRV | LKCDVTQSRP | LGAALLPPAD |
| Pteropus_alecto_1 | GNRAKGPEKE | EKLRRRAIKQV | LKCDVTQSRP | LGAVSLPLAD |
| Pteropus_vampyrus_1 | GNRAKGPEKE | EKLRRRAIKQV | LKCDVTQSRP | LGAVSLPLAD |
| Chrysochloris_asiatica_1 | GNRVKGPEKE | EKLRRRAVKQV | LKCDVTQSQP | LGPVSLPLAD |
| Loxodonta_africana_1 | GNRVKGPEKE | EKLRRRAVKQV | LKCDVTQSQP | MGPVSLPLAD |
| Otolemur_garnettii_1 | GNRVKGAEKE | EKLRRRTVTQV | LKCDVTQSQP | LGAEPFRAAD |
| Eptesicus_fuscus_1 | GNRVKVGPEKE | EKLRRRAVKQV | LKCDVTQSRP | LGAASLPLAD |
| Myotis_davidii_1 | GNRVKGQPEKE | EKLRRRAVKQV | LKCDVTQSRP | LGAASLPLAD |
| Myotis_brandtii_1 | GNRVKGQPEKE | EKLRRRAVKQV | LKCDVTQSRP | LGAASLPLAD |
| Myotis_lucifugus_1 | GNRVKGQPEKE | EKLRRRAVKQV | LKCDVTQSRP | LGAASVPLAD |
| Tarsius_syrichta_1 | GNRVKGPEKE | EKLRRQAVKQV | LKCDVTQSQP | LGAVSLPPAD |
| Tupaia_chinensis_1 | GNRVKGPEKE | EKLRRQAVKQV | LKCDVTQSQP | LGAVCLPPAD |
| Propithecus_coquereli_1 | GNRVKGPEKE | EKLRRQAVTQV | LKCDVTQSRP | LGAVHLPAAD |
| Microcebus_murinus_1 | GNRVKGPEKE | EKLRRQAVTQV | LKCDVTQSRP | LGAVPLPAAD |
| Acinonyx_jubatus_1 | GNRIKELEKE | EKLRRRVVTQV | LKCDVTQSRP | LGSVPLPLAD |
| Panthera_tigris_altaica_1 | GNRIKELEKE | EKLRRRVVTQV | LKCDVTQSRP | LGSVPLPLAD |
| Mustela_putorius_furo_1 | GNRAKGPEKE | EKLRRRAVKQV | LKCDVTQSRP | LGAVSLPAAD |
| Canis_lupus_familiaris_1 | GNRVKGLEKE | EKLRRRVVKQV | LKCDVTQSRP | LGAMSLPPAD |
| Leptonychotes_weddellii_1 | GNRAKALEKE | EKLRRRVVRQV | LKCDVTQSRP | LGAMSVPLAD |
| Ailuropoda_melanoleuca_1 | GNRAKELEKE | EKLRRRTVRRV | LKCDVTQSRP | LGAVSLPPAD |
| Ursus_maritimus_1 | GNRAKELEKE | EKLRRRAVTRG | LKCDVTQSRP | LGAVSLPPAD |
| Nomascus_leucogenys_1 | GNRVKGPEKE | EKLRRQAVKQV | LKCDVTQSQP | LGSVPLPPAD |
| Pongo_abelii_1 | GNRVKGPEKE | EKLRRQAVKQV | LKCDVTQSQP | LGAVPLPPAD |
| Pan_paniscus_1 | GNRVKGPEKE | EKLRRQAVKQV | LKCDVTQSQP | LGAVPLPPAD |
| Gorilla_gorilla_gorilla_1 | GNRVKGPEKE | EKLRRQAVKQV | LKCDVTQSQP | LGAVSLPPAD |
| Pan_troglodytes_1 | GNRVKGPEKE | EKLRRQAVKQV | LKCDVTQSQP | LGAVPLPPAD |
| Mandrillus_leucophaeus_1 | GNRVKGPEKE | EKLRRQVVKQV | LKCDVTQSQP | LGAVPLPLAD |
| Chlorocebus_sabaeus_1 | GNRVKGPEKE | EKLRRQAVKQV | LKCDVTQSQP | LGAVPLPPAD |
| Cercocebus_atys_1 | GNRVKGPEKE | EKLRRQAVKQV | LKCDVTQSQP | LGAVPLPLAD |
| Rhinopithecus_roxellana_1 | GNRVKGPEKE | EKLRRQAVKQV | LKCDVTQSQP | LGAVPLPLAD |
| Papio_anubis_1 | GNRVKGPEKE | EKLRRQAVKQV | LKCDVTQSQP | LGAVPLPLAD |
| Macaca_fascicularis_1 | GNRVKGPEKE | EKLRRQAVKQV | LKCDVTQSQP | LGAVPLPLAD |
| Macaca_mulatta_1 | GNRVKGPEKE | EKLRRQAVKQV | LKCDVTQSQP | LGAVPLPLAD |
| Macaca_nemestrina_1 | GNRVKGPEKE | EKLRRQAVKQV | LKCDVTQSQP | LGAVPLPLAD |
| Colobus_angolensis_palliatu_1 | GNRVKGPEKE | EKLRRQAVKQV | LKCDVTQSQP | LGAVPLPLAD |
| Saimiri_boliviensis_boliviensis_1 | GNRVKGPEKE | ERLRQAVKQV | LKCDVTQSQP | LGAVSVPLAD |
| Callithrix_jacchus_1 | GNRVNGPEKE | ERLRQAVKQV | LKCDVTQSQP | LGAVSLPLAD |
| Ceratotherium_simum_simum_1 | GNRVKGPEKE | EKLRRRAVKQV | LKCDVTQSRP | LGAVSLPLAD |
| Orcinus_orca_1 | GNRVKGPEKE | EKLRRRAIKQV | LKCDVTQSWP | LGAVPLPPAD |
| Tursiops_truncatus_1 | GNRVKGPEKE | EKLRRRAIKQV | LKCDVTQSWP | LGAVPLPPAD |
| Lipotes_vexillifer_1 | GNRVKGPEKE | EKLRRQAVKQV | LKCDVTQSWP | LGAVPLPPAD |
| Physeter_catodon_1 | GNRVKGPEKE | EKLRRRAIKQV | LKCDVTQSWP | LGAVPLPPAD |
| Balaenoptera_acutorostrata_scammoni_1 | GNRVKGPEKE | EKLRRRAVKQV | LKCDVTQSWP | LGAVPLPPAD |
| Nannospalax_galili_1 | GNRIKGPEKE | EKLRRQAVKQV | LKCDVTQSQP | LGGVPLPPAD |
| Cricetulus_griseus_1 | GNRTKGPEKE | EKLRRRAIKQV | LKCDVTQSQP | LGAVSLPPAD |
| Microtus_ochrogaster_1 | GNRTKGPEKE | EKLRRRAIKQV | LKCDVTQSQP | LGEVSLPPAD |
| Mesocricetus_auratus_1 | GNRTKGLEKE | EKLRRRAVKQV | LKCDVTQSQP | LGGVSLPPAD |
| Peromyscus_maniculatus_bairdii_1 | GNRTKGPEKE | EKLRRRAIKQV | LKCDVTQSQP | LGGVSLPPAD |
| Mus_musculus_1 | GNRMKGPEKE | EKLRRRAIKQV | LKCDVTQSQP | LGGVSLPPAD |
| Rattus_norvegicus_1 | GNRTKGPEKE | EKLRRRAIKQV | LKCDVSSQSQ | LGGVSLPPAD |
| Jaculus_jaculus_1 | GNRTKGPEKE | EKLRRRTVKQV | LKCDVTQSQP | LGGVSLPPAD |
| Marmota_marmota_marmota_1 | GNRVKGPEKE | EKLRRRAVRQV | LKCDVTQSQP | LGAVRVAPAD |
| Ictidomys_tridecemlineatus_1 | GNRVKGPEKE | EKLRRRAVRQV | LKCDVTQSQP | LGAVRVAPAD |
| Monodelphis_domestica_1 | GDGEKGAEKE | ERLRQKVKHI | LKCDVTQSQP | LGSDSLPPAD |
| Sarcophilus_harrisii_1 | GNREKWTEKE | ERLRQKVKQL | LKCDVTQSQP | LGPVSLPPAD |
| Ornithorhynchus_anatinus_1 | GDRSKWAEKE | EKLRRRAVSR | LECDVTRSRP | LGSVSLPPAD |
| Pterocles_gutturalis_1 | GDSEKWAEKE | EKLRRQVKQV | LKCDVTKANP | AAPVSLPPAD |
| Acanthisitta_chloris_1 | GDREKWAEKQ | ETVRKKVKRV | LKCDVTKANP | TGPVSLPPAD |
| Manacus_vitellinus_1 | GDREKWAEKQ | EKVRKKVKQV | LKCDVTRANP | TGAVSLPPAD |

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|---------------------------------------|------------|-------------|------------|-------------|
| Homo_sapiens_1 | CVLSTLCLDA | ACPDLPPTYCR | ALRNLGSLLK | PGGFLVIMDA |
| Erinaceus_europaeus_1 | CLLSTLCLDA | ACPDLPSPYRE | ALHNLGGLLK | PGGFLVILDA |
| Pteropus_alecto_1 | CLLSTLCLDA | ACPDLPAYHS | ALRNLSSLLK | PGGYLVIIDA |
| Pteropus_vampyrus_1 | CLLSTLCLDA | ACPDLPAYHS | ALRNLSSLLK | PGGYLVIIDA |
| Chrysochloris_asiatica_1 | CLLTTLCLDA | ACPDLPITYRS | ALKNLSSLLK | PGGFLVIVDA |
| Loxodonta_africana_1 | CLLTTLCLDA | ACPDLPSTYHM | ALKNLSSLLK | PGGFLVIVDA |
| Otolemur_garnettii_1 | CLLSTLCLDA | ACPDLPITYRA | ALRNLGSLLK | PGGFLVVADA |
| Eptesicus_fuscus_1 | CLLSTLCLDA | ACPDLPITYHT | ALKNLSSLLK | PGGYLVIIVDA |
| Myotis_davidii_1 | CLLSTLCLDA | ACPDLPITYRT | ALRNLSSLLK | PGGHLVLVDA |
| Myotis_brandtii_1 | CLLSTLCLDA | ACPDLPITYRS | ALRNLSSLLK | PGGHLVLVDA |
| Myotis_lucifugus_1 | CLLSTLCLDA | ACPDLPITYRS | ALRNLSSLLK | PGGHLVLVDA |
| Tarsius_syrichta_1 | CLLSTLCLDA | ACPDLPITYRM | ALRNLSSLLK | PGGFLVVVDA |
| Tupaia_chinensis_1 | CLLSALCLDA | ACADLPITYRN | ALQNLGSLLK | PGGFLVIVDA |
| Propithecus_coquereli_1 | CLLSTLCLDA | ACPDLPISYRT | ALRNLGTLK | PGGFLVVVDV |
| Microcebus_murinus_1 | CLLSTLCLDA | ACPDLPISYRT | ALRNLGSLLK | PGGFLVVVDV |
| Acinonyx_jubatus_1 | CLLSTLCLDA | ACPDLPAYCT | ALRNLSSLLK | PGGFLVVVDA |
| Panthera_tigris_altaica_1 | CLLSTLCLDA | ACPDLPAYCT | ALRNLSSLLK | PGGFLVVVDA |
| Mustela_putorius_furo_1 | CVLSTLCLDA | ACPDLPAYRA | ALRNLGSLLK | PGGFLVVVDA |
| Canis_lupus_familiaris_1 | CLLSTLCLDA | ACPDLPAYCA | ALRNLGSLLK | PGGFLVVVDA |
| Leptonychotes_weddellii_1 | CLLSTLCLDA | ACPDLPAYCA | ALRNLGSLLK | PGGFLVVVDA |
| Ailuropoda_melanoleuca_1 | CLLSTLCLDA | ACPDLPAYCA | ALRNLGSLLK | PGGFLVVVDA |
| Ursus_maritimus_1 | CLLSTLCLDA | ACPDLPAYCA | ALRNLGSLLK | PGGFLVVVDA |
| Nomascus_leucogenys_1 | CVLSTLCLDA | ACPDLPITYHR | ALRNLGSLLK | PGGFLVIMDA |
| Pongo_abelii_1 | CVLSTLCLDA | ACPDLPITYRR | ALRNLGSLLK | PGGFLVIMDA |
| Pan_paniscus_1 | CVLSTLCLDA | ACPDLPITYCS | ALRNLGSLLK | PGGFLVIMDA |
| Gorilla_gorilla_gorilla_1 | CVLSTLCLDA | ACPDLPITYCR | ALRNLGSLLK | PGGFLVIMDA |
| Pan_troglodytes_1 | CVLSTLCLDA | ACPDLPITYCR | ALRNLGSLLK | PGGFLVIMDA |
| Mandrillus_leucophaeus_1 | CLLSTLCLDA | ACPDLPITYRR | ALRNLSSLLK | PGGFLVIMDA |
| Chlorocebus_sabaeus_1 | CLLSTLCLDA | ACPDLPITYRR | ALRNLGSLLK | PGGFLVIMDA |
| Cercocebus_atys_1 | CLLSTLCLDA | ACPDLPITYRR | ALRNLGSLLK | PGGFLVIMDA |
| Rhinopithecus_roxellana_1 | CLLSTLCLDA | ACPDLPITYRR | ALRNLGSLLK | PGGFLVIMDA |
| Papio_anubis_1 | CLLSTLCLDA | ACPDLPITYRR | ALRNLGSLLK | PGGFLVIMDA |
| Macaca_fascicularis_1 | CLLSTLCLDA | ACPDLPITYRR | VLRNLGSLLK | PGGFLVIMDA |
| Macaca_mulatta_1 | CLLSTLCLDA | ACPDLPITYRR | ALRNLGSLLK | PGGFLVIMDA |
| Macaca_nemestrina_1 | CLLSTLCLDA | ACPDLPITYRR | ALRNLGSLLK | PGGFLVIMDA |
| Colobus_angolensis_palliatu_1 | CLLSTLCLDA | ACPDLPITYRR | ALRNLGSLLK | PGGFLVIMDA |
| Saimiri_boliviensis_boliviensis_1 | CLLSTLCLDA | ACPDLPITYCR | ALRNLGSLLK | PGGFLVIMDA |
| Callithrix_jacchus_1 | CLLSTLCLDA | ACPDLPITYCR | VLRNLGSLLK | PGGFLVIMDA |
| Ceratotherium_simum_simum_1 | CLLSTLCLDA | ACPDLPAFCT | ALKNLGSLLK | PGGFLVIVDA |
| Orcinus_orca_1 | CLLSTLCLDA | ACPDLPAYRA | ALRNLGSLLK | PGGFLVLVDA |
| Tursiops_truncatus_1 | CLLSTLCLDA | ACPDLPAYRA | ALRNLGSLLK | PGGFLVLVDA |
| Lipotes_vexillifer_1 | CLLSTLCLDA | ACPDLPAYRT | ALRNLGSLLK | PGGFLVLVDA |
| Physeter_catodon_1 | CLLSTLCLDA | ACPDLPAYRT | ALRNLGSLLK | PGGFLVLVDA |
| Balaenoptera_acutorostrata_scammoni_1 | CLLSTLCLDA | ACPDLPAYRT | ALRNLGSLLK | PGGFLVLVDA |
| Nannospalax_galili_1 | CLLSTLCLDA | ACPDLPSTYCT | ALRNLGSLLK | PRGFLVILDA |
| Cricetulus_griseus_1 | CLLSTLCLDA | ACPDLPITYCT | ALRNLGSLLK | PGGFLVMVDA |
| Microtus_ochrogaster_1 | CLLSTLCLDA | ACPDLPITYRT | ALRNLGSLLK | PGGHLVLVDA |
| Mesocricetus_auratus_1 | CLLSTLCLDA | ACPDLPITYCN | ALRNLGSLLK | PGGFLVMVDA |
| Peromyscus_maniculatus_bairdii_1 | CLLSTLCLDA | ACPDLPITYRT | ALRNLGSLLK | PGGFLVMVDA |
| Mus_musculus_1 | CLLSTLCLDA | ACPDLPAYRT | ALRNLGSLLK | PGGFLVMVDA |
| Rattus_norvegicus_1 | CLLSTLCLDA | ACPDLPAYRT | ALRNLGSLLK | PGGFLVMVDA |
| Jaculus_jaculus_1 | CLLSTLCLDA | ACPDLPAYRA | ALRNLGSLLK | PGGFLVVVDA |
| Marmota_marmota_marmota_1 | CLLSTLCLDA | ACPDLPITYCT | ALRNLGSLLK | PGGFLVVVDA |
| Ictidomys_tridecemlineatus_1 | CLLSTLCLDA | ACPDLPITYCT | VLRNLGSLLK | PGGFLVVVDA |
| Monodelphis_domestica_1 | CLLTALCLHA | ACKDLPTYQQ | ALKNLSSLLK | PGGFLVFFDV |
| Sarcophilus_harrisii_1 | CLLSALCLDA | ACKDLPTYQQ | SLRNLHSLK | PGGFLVLIDA |
| Ornithorhynchus_anatinus_1 | CLLSTLCLDA | ACKDLPSYQA | ALKHIATLLK | PGGYLVLVDA |
| Pterocles_gutturalis_1 | CVVSAFCLEA | ACKDLAAFRS | ALRNIGAFVK | PGGHLVMLIT |
| Acanthisitta_chloris_1 | CVVSTLCLEA | ACKDLPTFRS | ALRNVTGLVR | PGGHLVLLTV |
| Manacus_vitellinus_1 | CIVSTLCLEG | ACKDLPTFPS | ALRNIGTLVK | PGGHLVLVTV |

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|---------------------------------------|------------|------------|------------|------------|
| Homo_sapiens_1 | LKSSYYMIGE | QKFSSLPGR | EAVEAAVKEA | GYTIEWFEVI |
| Erinaceus_europaeus_1 | LKSSYYMIGE | QRFSSLCGR | EAIEAAVREA | GFAIEQFEVI |
| Pteropus_alecto_1 | LESSYYMIGE | QRFSSLCGR | EEVKAARE | GYTIKQFEVI |
| Pteropus_vampyrus_1 | LESSYYMIGE | QRFSSLCGR | EEVKAARE | GYTIKQFEVI |
| Chrysochloris_asiatica_1 | LKSSYYMIGK | QRFSSLSLR | ETVEAAVRDA | GYSIEQFHV |
| Loxodonta_africana_1 | LKSSYYMIGE | QRFSSLSLGR | EAVEAAVREA | GYTVEQFHV |
| Otolemur_garnettii_1 | LQSSYYTIGE | QRFSSLPGR | EAVEAAVREA | GFSIEQFQV |
| Eptesicus_fuscus_1 | LKSSYYMIGE | QRFSSLSLDR | EAVEAAVREA | GYAIKQFDVI |
| Myotis_davidii_1 | LKSSYYMIGE | QRFSSLSLDR | EAVEAAVREA | GYAIKQFDVI |
| Myotis_brandtii_1 | LKSSYYMIGE | QRFSSLSLDR | EAVEAAVREA | GYAIKQFDVI |
| Myotis_lucifugus_1 | LKSSYYMIGE | QRFSSLSLDR | EAVEAAVREA | GYAIKQFDVI |
| Tarsius_syrichta_1 | LKSSYYMIGE | QRFSSLPGR | EAVEAAVKEA | GYVIEQFEVI |
| Tupaia_chinensis_1 | LKSSYYTIGE | QRFSSLCGR | EAVEAAVRDA | GYSIEQFEVI |
| Propithecus_coquereli_1 | LKCNQYMIGE | QRFSSLSVDR | EAVEAAVREA | GYAIEQFEVI |
| Microcebus_murinus_1 | LKSSYYMIGE | QRFSSLSVDR | QAVEAAVREA | GYAIEQFEVI |
| Acinonyx_jubatus_1 | LKSSYYMIGE | QKFSSLCGR | EAIEAAVREA | GFSVEQFEVI |
| Panthera_tigris_altaica_1 | LKSSYYMIGE | QKFSSLCGR | EAIEAAVREA | GYSIEQFEVI |
| Mustela_putorius_furo_1 | LKSSYYMIGE | QRFSSLCGR | EAIEAAVREA | GFSIEWFEVI |
| Canis_lupus_familiaris_1 | LKSSYYMIGE | QRFSSLCGR | EAVEAAVREA | GYSVERFEVI |
| Leptonychotes_weddellii_1 | LKSSYYMIGE | RRFSSLCGR | EAIEAAVREA | GYSVEWFEVI |
| Ailuropoda_melanoleuca_1 | LKSSYYMIGE | QRFSSLCGR | EAIEAAVREA | GYSVERFEVI |
| Ursus_maritimus_1 | LKSSYYMIGE | QRFSSLCGR | EAIEAAVREA | GYSVERFEVI |
| Nomascus_leucogenys_1 | LKSSYYMIGE | QKFSSLPGR | EAVEAAVKEA | GYTIEWFEVI |
| Pongo_abelii_1 | LKSSYYMIGE | QKFSSLPGR | EAVEAAVKEA | GYTIEWFEVI |
| Pan_paniscus_1 | LKSSYYMIGE | QKFSSLPGR | EAVEAAVKEA | GYTIEWFEVI |
| Gorilla_gorilla_gorilla_1 | LKSSYYMIGE | QKFSSLPGR | EAVEAAVKEA | GYTIEWFEVI |
| Pan_troglodytes_1 | LKSSYYMIGE | QKFSSLPGR | EAVEAAVKEA | GYTIEWFEVI |
| Mandrillus_leucophaeus_1 | LKSSYYMIGE | QKFSSLPGR | EAVEAAVKEA | GYTIEWFEVI |
| Chlorocebus_sabaeus_1 | LKSSYYMIGE | QKFSSLPGR | EAVEAAVKEA | GYTIEWFEVI |
| Cercocebus_atys_1 | LKSSYYMIGE | RKFSSLPGR | EAVEAAVKEA | GYTIEWFEVI |
| Rhinopithecus_roxellana_1 | LKSSYYMIGE | QKFSSLPGR | EAVEAAVKEA | GYTIEWFEVI |
| Papio_anubis_1 | LKSSYYMIGE | QKFSSLPGR | EAVEAAVKEA | GYTIEWFEVI |
| Macaca_fascicularis_1 | LKSSYYMIGE | QKFSSLPGR | EAVEAAVKEA | GYTIEWFEVI |
| Macaca_mulatta_1 | LKSSYYMIGE | QKFSSLPGR | EAVEAAVKEA | GYTIEWFEVI |
| Macaca_nemestrina_1 | LKSSYYMIGE | QKFSSLPGR | EAVEAAVKEA | GYTIEWFEVI |
| Colobus_angolensis_palliatu_1 | LKSSYYMIGE | QKFSSLPGR | EAVEAAVKEA | GYTIEWFEVI |
| Saimiri_boliviensis_boliviensis_1 | LKSSYYMIGE | QKFSSLPGR | EAVEAAVKEA | GYTIEWFEVI |
| Callithrix_jacchus_1 | LKSSYYMIGE | QKFSSLPGR | EAVEAAVKEA | GYTIEWFEVI |
| Ceratotherium_simum_simum_1 | LKSSYYMIGE | QRFSSLCGR | EAVEAAVIEA | GYTIEWFEVI |
| Orcinus_orca_1 | LKSSYYMIGE | QRFSSLCGR | EAVEAAVREA | GYTIEWFEVI |
| Tursiops_truncatus_1 | LKSSYYMIGE | QRFSSLCGR | EAVEAAVREA | GYTIEWFEVI |
| Lipotes_vexillifer_1 | LKSSYYMIGE | QRFSSLCGR | EAVEAAVREA | GYTIEWFEVI |
| Physeter_catodon_1 | LKSSYYMIGE | QRFSSLCGR | EAVEAAVREA | GYTIEWFEVI |
| Balaenoptera_acutorostrata_scammoni_1 | LKSSYYMIGE | QRFSSLCGR | EAVEAAVREA | GYTIEWFEVI |
| Nannospalax_galili_1 | LKSSYYMIGE | QRFSSLSLGR | EAVEAAVREA | GYSIERFEVI |
| Cricetulus_griseus_1 | LKSSYYMIGE | QRFSSLPGR | EAVEAAVREA | GYTIEWFEVI |
| Microtus_ochrogaster_1 | LKSSYYMIGE | QRFSSLPGR | EAVEAAVREA | GYTIEWFEVI |
| Mesocricetus_auratus_1 | LKSSYYMIGE | QRFSSLPGR | EAVEAAVREA | GYTIERFEVI |
| Peromyscus_maniculatus_bairdii_1 | LKSSYYMIGE | QRFSSLPGR | EAVEAAVREA | GYTIERFEVI |
| Mus_musculus_1 | LKSSYYMIGE | QKFSSLPGR | ETVRDAVEEA | GYTIEWFEVI |
| Rattus_norvegicus_1 | LKSSYYMIGE | QKFSSLPGR | EAVEAAVREA | GYTIEWFEVI |
| Jaculus_jaculus_1 | LKSSYYMIGE | QRFSSLPGR | EAVEAAVREA | GYTIEWFEVI |
| Marmota_marmota_marmota_1 | LKSSYYTIGQ | QRFSSLPGR | EAVEAAVREA | GYTIEWFEVI |
| Ictidomys_tridecemlineatus_1 | LKSSYYTIGQ | QRFSSLPGR | EAVEAAVREA | GYTIEWFEVI |
| Monodelphis_domestica_1 | LKSSYYMTGN | QRFSSLPGR | EEVEDAVVKA | GYMIKEFEVI |
| Sarcophilus_harrisii_1 | LRSSYYMIGD | QRFSSLPGR | EAVEAAVREA | GYTIQFEVI |
| Ornithorhynchus_anatinus_1 | LRSSYYMIGQ | QKFSSLPGR | ETVEAAVREA | GFAIQFEVI |
| Pterocles_gutturalis_1 | LQGTFFAFNK | QVFSSLYLER | NAVVEAVEGA | GFDVKFREVI |
| Acanthisitta_chloris_1 | LGETYYTFNK | QVFSSLYLER | HEVEAAVREA | GFEVTFSEAE |
| Manacus_vitellinus_1 | LGETYYAFNK | QVFSSLYLER | HEVEAAVREA | GFEVTFSEAE |

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|---------------------------------------|-------------|-------------|------------|-------|-------|
| Homo_sapiens_1 | SQSYSSSTMAN | NEGLFSLVAR | KLSRPL | ---- | ----- |
| Erinaceus_europaeus_1 | SQSYPSGMAD | NEGLFSLVGR | KLDTSGN | ---- | ----- |
| Pteropus_alecto_1 | PQSYSSSTRAN | NKGLFFLVGQ | KLSRSE | ---- | ----- |
| Pteropus_vampyrus_1 | PQSYSSSTRAN | NKGLFFLVGQ | KLSRSE | ---- | ----- |
| Chrysochloris_asiatica_1 | SQSYSSSTTAD | NEGLFSLVGR | KLNGSV | ---- | ----- |
| Loxodonta_africana_1 | SQSYSPTMAD | NEGLFFLVGR | KLSGSV | ---- | ----- |
| Otolemur_garnettii_1 | AQSYSSSTTAD | NEGLFFLVGR | KLSRSV | ---- | ----- |
| Eptesicus_fuscus_1 | SQSYSSSTVAN | NEGLFFLVGQ | KLSRSA | ---- | ----- |
| Myotis_davidii_1 | SQSYSPTMAN | NEGLFFLVGQ | KLSRSA | ---- | ----- |
| Myotis_brandtii_1 | SQSYSSSTVAN | NEGLFFLVGQ | KLSRSA | ---- | ----- |
| Myotis_lucifugus_1 | SQSYSSSTVAN | NEGLFFLVGQ | KLSRSA | ---- | ----- |
| Tarsius_syrichta_1 | SQSYSSNMAN | NEGLFFLVAR | KLSRSM | ---- | ----- |
| Tupaia_chinensis_1 | SQRYSPTTAD | NEGLFALVGR | KLSRSV | ---- | ----- |
| Propithecus_coquereli_1 | SQNYSSSTMAN | NEGLFILVGR | KLSRST | ---- | ----- |
| Microcebus_murinus_1 | SQNYPSSTMAN | NEGLFFLVGR | KLSRSA | ---- | ----- |
| Acinonyx_jubatus_1 | SRRYSSTMCD | NEGLFSLVGR | KLSKSV | ---- | ----- |
| Panthera_tigris_altaica_1 | SRRYSSTMCD | NEGLFSLVGR | KLSKSV | ---- | ----- |
| Mustela_putorius_furo_1 | CQSYSSSTMCD | NEGLFSLVGR | KLSKAV | ---- | ----- |
| Canis_lupus_familiaris_1 | CQGYSSSTMCD | NEGLFSLVGR | KLSKSV | ---- | ----- |
| Leptonychotes_weddellii_1 | CQSYPSSTMCD | NEGLFALVGR | KLSKSV | ---- | ----- |
| Ailuropoda_melanoleuca_1 | CQSYSSSTMCD | NEGLFSLVGR | KLSTSV | ---- | ----- |
| Ursus_maritimus_1 | CQSYSSSTMCD | NEGLFSLVGR | KLSTSV | ---- | ----- |
| Nomascus_leucogenys_1 | SQSYSSSTMAN | NEGLFSLVGR | KLSGPL | ---- | ----- |
| Pongo_abelii_1 | SQSYSSSTMAN | NEGLFSLVGR | KLSRPL | ---- | ----- |
| Pan_paniscus_1 | SQSYSSSTMAN | NEGLFSLVGR | KLSRPL | ---- | ----- |
| Gorilla_gorilla_gorilla_1 | SQSYSSSTMAN | NEGLFSLVGR | KLSRPL | ---- | ----- |
| Pan_troglodytes_1 | SQSYSSSTMAN | NEGLFSLVGR | KLSRPL | ---- | ----- |
| Mandrillus_leucophaeus_1 | SQSYSSSTMAN | NEGLFSLVGR | KLSRSL | ---- | ----- |
| Chlorocebus_sabaeus_1 | SQSYSSSTMAN | NEGLFSLVGR | KLSRSL | ---- | ----- |
| Cercocebus_atys_1 | SQSYSSSTMAN | NEGLFSLVGR | KLSRSL | ---- | ----- |
| Rhinopithecus_roxellana_1 | SQSYSSSTMAN | NEGLFSLVGR | KLSRSL | ---- | ----- |
| Papio_anubis_1 | SQSYSSSTMAN | NEGLFSLVGR | KLSRSL | ---- | ----- |
| Macaca_fascicularis_1 | SQSYSSSTMAN | NEGLFSLVGR | KLSRSL | ---- | ----- |
| Macaca_mulatta_1 | SQSYSSSTMAN | NEGLFSLVGR | KLSRSL | ---- | ----- |
| Macaca_nemestrina_1 | SQSYSSSTMAN | NEGLFSLVGR | KLSRSL | ---- | ----- |
| Colobus_angolensis_palliatus_1 | SQSYSSSTMAN | NEGLFSLVGR | KLSRSL | ---- | ----- |
| Saimiri_boliviensis_boliviensis_1 | SQSYSSSTMAN | NEGLFSLVGR | KPSRSP | ---- | ----- |
| Callithrix_jacchus_1 | SQSYSSSTMAN | NEGLFSLVGR | KPNRSP | ---- | ----- |
| Ceratotherium_simum_simum_1 | SQSYSSSTMAD | NEGLFLLVGQ | KPSRSV | ---- | ----- |
| Orcinus_orca_1 | SQSYSSNMAN | NEGLFFLVGR | KLSTSV | ---- | ----- |
| Tursiops_truncatus_1 | SQSYSSNMAN | NEGLFSLVGR | KLSTSV | ---- | ----- |
| Lipotes_vexillifer_1 | SQSYSSNMAN | NEGLFSLVGR | KLSTSV | ---- | ----- |
| Physeter_catodon_1 | SQSYSSNMAN | NEGLFCLVGR | KLSTSV | ---- | ----- |
| Balaenoptera_acutorostrata_scammoni_1 | SQSYSSNMAN | NEGLFSLVGR | KLSTSV | ---- | ----- |
| Nannospalax_galili_1 | SQNYSSSTIAN | NEGLFSLVGR | KMVRSV | ---- | ----- |
| Cricetulus_griseus_1 | SQNYSSASAN | NEGLFSLVGR | KAGGAE | ---- | ----- |
| Microtus_ochrogaster_1 | SQNYSSATAN | NEGLFSLVGC | KLGRAE | ---- | ----- |
| Mesocricetus_auratus_1 | SQNYSSATAN | NEGLFSLVGR | KVGGAE | ---- | ----- |
| Peromyscus_maniculatus_bairdii_1 | SQNYSSAIAN | NEGLFSLVGR | KPGRAE | ---- | ----- |
| Mus_musculus_1 | SQNYSSSTTSN | NEGLFSLVGR | KPGRSE | ---- | ----- |
| Rattus_norvegicus_1 | SQSYSSSTTSN | NEGLFSLVGR | KPVGSE | ---- | ----- |
| Jaculus_jaculus_1 | SQSYSSSTTAD | NEGLFALVGR | KLGRP | ---- | ----- |
| Marmota_marmota_marmota_1 | SQSYSSSTTAD | NEGLFFLVGR | KADRSV | ---- | ----- |
| Ictidomys_tridecemlineatus_1 | SQSYSSSTMAD | NEGLFFLVGR | KADRSV | ---- | ----- |
| Monodelphis_domestica_1 | SQSYSSNSAN | NKGVFYLVGQ | K----- | ----- | ----- |
| Sarcophilus_harrisii_1 | PQSYSKTRAD | NEGLFYLVGQ | KFDGK | ---- | ----- |
| Ornithorhynchus_anatinus_1 | PQSYSKRAQAA | NDGLFYLVGQ | KLSQA | ---- | ----- |
| Pterocles_gutturalis_1 | PWPPSDVRTD | CKDVLSFVAR | KRASVT | ---- | ----- |
| Acanthisitta_chloris_1 | PYVLGDGRTD | SRAMLVSLVAR | RRASLSA | ---- | ----- |
| Manacus_vitellinus_1 | PYTVSEECMD | COGTGLVGR | RRPSVECEGT | GGEQP | |