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|----|--|-----------|--|-----|--|----------------|---|--|----|
| gi | | 73765544 | | ref | | NP_000305.3 | ----- | MTAIIKEIVSRNRRRYQEDGFDDLTYIYPNI | 32 |
| gi | | 50978942 | | ref | | NP_001003192.1 | ----- | MTAIIKEIVSRNRRRYQEDGFDDLTYIYPNI | 32 |
| gi | | 6679523 | | ref | | NP_032986.1 | ----- | MTAIIKEIVSRNRRRYQEDGFDDLTYIYPNI | 32 |
| gi | | 13928830 | | ref | | NP_113794.1 | ----- | MTAIIKEIVSRNRRRYQEDGFDDLTYIYPNI | 32 |
| gi | | 194678909 | | ref | | XP_613125.4 | ----- | ----- | 23 |
| gi | | 50749258 | | ref | | XP_421555.1 | ----- | ----- | 32 |
| gi | | 49227345 | | ref | | NP_001001822.1 | ----- | MAAIIKEIVSRNRRRYQEDGFDDLTYIYPNI | 32 |
| gi | | 114631699 | | ref | | XP_521544.2 | MRDGGGCHGPEPLSAPPVARAPEAAGGGRSSEYDSSSPHSAAAAARPLAAEFKQAQSLQPSGRRSSHYPAAVQSQAAAEERGAATAKSRATILQKKPRHQQLLPSSLSSFFSHRLLPDM | 150 | |
| gi | | 281364767 | | ref | | NP_001162933.1 | ----- | MANTISLSMNVIRNVVSKRIRVKEKGYDLDLTYINDNI | 39 |
| gi | | 118790551 | | ref | | XP_553421.2 | ----- | LRDMANPINFIREKVSQGRFRITDDEFNLDTYIYIPKI | 38 |

1.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100.....110.....120.....130.....140.....150



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|----|--|-----------|--|-----|--|----------------|---|--|-----|
| gi | | 73765544 | | ref | | NP_000305.3 | ----- | IAMGFPAER-LEGVYRNNIDVVRFLLDSKHKNHKYYIYNLCAERHYDTAKFNCRVAQYPPEDHNPPOLELIKPFCELDLQWLSEDDNHVAIHCAGKAGRTGVMI | 181 |
| gi | | 50978942 | | ref | | NP_001003192.1 | ----- | IAMGFPAER-LEGVYRNNIDVVRFLLDSKHKNHKYYIYNLCAERHYDTAKFNCRVAQYPPEDHNPPOLELIKPFCELDLQWLSEDDNHVAIHCAGKAGRTGVMI | 181 |
| gi | | 6679523 | | ref | | NP_032986.1 | ----- | IAMGFPAER-LEGVYRNNIDVVRFLLDSKHKNHKYYIYNLCAERHYDTAKFNCRVAQYPPEDHNPPOLELIKPFCELDLQWLSEDDNHVAIHCAGKAGRTGVMI | 181 |
| gi | | 13928830 | | ref | | NP_113794.1 | ----- | IAMGFPAER-LEGVYRNNIDVVRFLLDSKHKNHKYYIYNLCAERHYDTAKFNCRVAQYPPEDHNPPOLELIKPFCELDLQWLSEDDNHVAIHCAGKAGRTGVMI | 181 |
| gi | | 194678909 | | ref | | XP_613125.4 | ----- | LEVCF----- | 157 |
| gi | | 50749258 | | ref | | XP_421555.1 | ----- | --MGFPAER-LEGVYRNNIDVVRFLLDSKHKNHKYYIYNLCAERHYDTAKFNCRVAQYPPEDHNPPOLELIKPFCELDLQWLSEDDNHVAIHCAGKAGRTGVMI | 147 |
| gi | | 49227345 | | ref | | NP_001001822.1 | ----- | IAMGFPAER-LEGVYRNNIDVVRFLLDSKHKNHKYYIYNLCAERHYDTAKFNCRVAQYPPEDHNPPOLELIKPFCELDLQWLSEDDNHVAIHCAGKAGRTGVMI | 181 |
| gi | | 114631699 | | ref | | XP_521544.2 | ----- | IAMGFPAER-LEGVYRNNIDVVRFLLDSKHKNHKYYIYNLCAERHYDTAKFNCRVAQYPPEDHNPPOLELIKPFCELDLQWLSEDDNHVAIHCAGKAGRTGVMI | 299 |
| gi | | 281364767 | | ref | | NP_001162933.1 | IAMGYPADKLEGLFRNRLSDVFKLLEENHAQHYKIYNLCSERSYDVAKFRGRVAVYPPDDHNPPTIELIRFSDVDMWLKEDSSNVVAVHCAGKAGRTGTMICAYLVFSGIKKKSAD | 189 | |
| gi | | 118790551 | | ref | | XP_553421.2 | IAMGFPAGN-VEALYRNNREHVVKLLTQRHDKKFKVYNLCSERSYDVAKFRGRVAVYPPDDHNPPTIELIRFSDVDMWLKEDSSNVVAVHCAGKAGRTGTMICAYLVFSGIKKKSAD | 186 | |

.....160.....170.....180.....190.....200.....210.....220.....230.....240.....250.....260.....270.....280.....290.....300



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|----|--|-----------|--|-----|--|----------------|--------------------------|---|-----|
| gi | | 73765544 | | ref | | NP_000305.3 | ----- | LKNHLDYRPVALLFHKMMFETIPMFSGGTCNPOFVVCQKVKIYSSNSG----- | 321 |
| gi | | 50978942 | | ref | | NP_001003192.1 | ----- | LKNHLDYRPVALLFHKMMFETIPMFSGGTCNPOFVVCQKVKIYSSNSG----- | 321 |
| gi | | 6679523 | | ref | | NP_032986.1 | ----- | LKNHLDYRPVALLFHKMMFETIPMFSGGTCNPOFVVCQKVKIYSSNSG----- | 321 |
| gi | | 13928830 | | ref | | NP_113794.1 | ----- | LKNHLDYRPVALLFHKMMFETIPMFSGGTCNPOFVVCQKVKIYSSNSG----- | 321 |
| gi | | 194678909 | | ref | | XP_613125.4 | ----- | LKNHLDYRPVALLFHKMMFETIPMFSGGTCNPOFVVCQKVKIYSSNSG----- | 287 |
| gi | | 50749258 | | ref | | XP_421555.1 | ----- | LKNHLDYRPVALLFHKMMFETIPMFSGGTCNPOFVVCQKVKIYSSNSG----- | 297 |
| gi | | 49227345 | | ref | | NP_001001822.1 | ----- | LRNKLEVPVALLFHKMMFETIPMFSGGTCNPOFVVCQKVKIYSSNSG----- | 320 |
| gi | | 114631699 | | ref | | XP_521544.2 | ----- | LKNHLDYRPVALLFHKMMFETIPMFSGGTCNPOFVVCQKVKIYSSNSG----- | 439 |
| gi | | 281364767 | | ref | | NP_001162933.1 | VCSSVPSKVSILNVEIRFS----- | 308 | |
| gi | | 118790551 | | ref | | XP_553421.2 | LRQNLTYRKVSLVSVSPRS----- | 302 | |

.....310.....320.....330.....340.....350.....360.....370.....380.....390.....400.....410.....420.....430.....440.....450



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|----|--|-----------|--|-----|--|----------------|---|---|-----|
| gi | | 73765544 | | ref | | NP_000305.3 | ----- | KNDLDKANKDKANRYFSPNFVKLYFTKIVVEEPSNPEASSSTSVTPDVSNEPDHYR----- | 403 |
| gi | | 50978942 | | ref | | NP_001003192.1 | ----- | KNDLDKANKDKANRYFSPNFVKLYFTKIVVEEPSNPEASSSTSVTPDVSNEPDHYR----- | 403 |
| gi | | 6679523 | | ref | | NP_032986.1 | ----- | KNDLDKANKDKANRYFSPNFVKLYFTKIVVEEPSNPEASSSTSVTPDVSNEPDHYR----- | 403 |
| gi | | 13928830 | | ref | | NP_113794.1 | ----- | KNDLDKANKDKANRYFSPNFVKLYFTKIVVEEPSNPEASSSTSVTPDVSNEPDHYR----- | 403 |
| gi | | 194678909 | | ref | | XP_613125.4 | ----- | KNDLDKANKDKANRYFSPNFVKLYFTKIVVEEPSNPEASSSTSVTPDVSNEPDHYR----- | 379 |
| gi | | 50749258 | | ref | | XP_421555.1 | ----- | KNDLDKANKDKANRYFSPNFVKLYFTKIVVEEPSNPEASSSTSVTPDVSNEPDHYR----- | 369 |
| gi | | 49227345 | | ref | | NP_001001822.1 | ----- | KTDLKANKDKANRYFSPNFVKLYFTKIVVEEPSNPEASSSTSVTPDVSNEPDHYR----- | 399 |
| gi | | 114631699 | | ref | | XP_521544.2 | ----- | KNDLDKANKDKANRYFSPNFVKV----- | 462 |
| gi | | 281364767 | | ref | | NP_001162933.1 | KSEIDDDVHKDSEHKRFSEEFKISIVFEAENFSDNVQAEASSEKERNEVILNFRSDVDSLSPNCYAEKKVLAIVNDNTKRSQITETLDHKDVTIKIQVDTSTNGKNTSTACKRKGPNKSKLLPFLNDSKKEIKRNHIFNQPSTKKIDLI | 458 | |
| gi | | 118790551 | | ref | | XP_553421.2 | KQEIIDAHKGSAKKCEQVCSV----- | 324 | |

.....460.....470.....480.....490.....500.....510.....520.....530.....540.....550.....560.....570.....580.....590.....600



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|----|--|-----------|--|-----|--|---|--|-----------------------------|-----|
| gi | | 73765544 | | ref | | NP_000305.3 | | ----- | 403 |
| gi | | 50978942 | | ref | | NP_001003192.1 | | ----- | 403 |
| gi | | 6679523 | | ref | | NP_032986.1 | | ----- | 403 |
| gi | | 13928830 | | ref | | NP_113794.1 | | ----- | 403 |
| gi | | 194678909 | | ref | | XP_613125.4 | | ----- | 379 |
| gi | | 50749258 | | ref | | XP_421555.1 | | ----- | 369 |
| gi | | 49227345 | | ref | | NP_001001822.1 | | ----- | 399 |
| gi | | 114631699 | | ref | | XP_521544.2 | | ----- | 462 |
| gi | | 281364767 | | ref | | NP_001162933.1 | | ----- | 514 |
| gi | | 118790551 | | ref | | XP_553421.2 | | ----- | 324 |
| | | | | | | KWQNSVHITSDFRSINENKNINYSYII | | CKQSSPKFNCGTEDGEEDEWEGESTYL | |
| | | | | | |610.....620.....630.....640.....650..... | | | |
