

gi	124286828	ref	NP_081823.2	-----MRLVLTGPPGESRASSEVQAPAPQTLGQAGPGGLGAPPRLRPLRPRRGGAA-----GSRGGRWGFWEFSEFPFPPGRWPAPHLHVRRHRSAA-----	89
gi	109472138	ref	XP_001072014.1	-----MRLVLTGPPGESRASSEVQAPAPQTLGQAGPGGLGAPPRLRPLRPRRGGAA-----GSRGGRWGFWEFSEFPFPPGRWPAPHLHVRRHRSAA-----	
gi	41349476	ref	NP_061169.2	-----MRLVLTGPPGESRASSEVQAPAPQTLGQAGPGGLGAPPRLRPLRPRRGGAA-----GSRGGRWGFWEFSEFPFPPGRWPAPHLHVRRHRSAA-----	
gi	114595868	ref	XP_001151366.1	-----MRLVLTGPPGESRASSEVQAPAPQTLGQAGPGGLGAPPRLRPLRPRRGGAA-----GSRGGRWGFWEFSEFPFPPGRWPAPHLHVRRHRSAA-----	
gi	73983976	ref	XP_540970.2	-----MRLVLTGPPGESRASSEVQAPAPQTLGQAGPGGLGAPPRLRPLRPRRGGAA-----GSRGGRWGFWEFSEFPFPPGRWPAPHLHVRRHRSAA-----	
gi	194667653	ref	XP_617668.4	-----MRLVLTGPPGESRASSEVQAPAPQTLGQAGPGGLGAPPRLRPLRPRRGGAA-----GSRGGRWGFWEFSEFPFPPGRWPAPHLHVRRHRSAA-----	
gi	118090345	ref	XP_420628.2	-----MRLVLTGPPGESRASSEVQAPAPQTLGQAGPGGLGAPPRLRPLRPRRGGAA-----GSRGGRWGFWEFSEFPFPPGRWPAPHLHVRRHRSAA-----	
gi	50539672	ref	NP_001002301.1	-----MRLVLTGPPGESRASSEVQAPAPQTLGQAGPGGLGAPPRLRPLRPRRGGAA-----GSRGGRWGFWEFSEFPFPPGRWPAPHLHVRRHRSAA-----	

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

gi	124286828	ref	NP_081823.2	-----MLGMYVDRFALKSSRVQDGMGLYTARRVRKGEKFGPFAGEKRMPEDDLNDMDYRLMWEVRGSKGEVLYILDATNPRHSNWLRFFVHEAPSOERKNLAAIQEGENIFYLAVDDIETDTTELLIGYLDSDVEAEEDDQALTMAREGK	145
gi	109472138	ref	XP_001072014.1	-----MLGMYVDRFALKSSRVQDGMGLYTARRVRKGEKFGPFAGEKRMPEDDLNDMDYRLMWEVRGSKGEVLYILDATNPRHSNWLRFFVHEAPSOERKNLAAIQEGENIFYLAVDDIETDTTELLIGYLDSDVEAEEDDQALTMAREGK	238
gi	41349476	ref	NP_061169.2	-----MLGMYVDRFALKSSRVQDGMGLYTARRVRKGEKFGPFAGEKRMPEDDLNDMDYRLMWEVRGSKGEVLYILDATNPRHSNWLRFFVHEAPSOERKNLAAIQEGENIFYLAVDDIETDTTELLIGYLDSDVEAEEDDQALTMAREGK	145
gi	114595868	ref	XP_001151366.1	-----MLGMYVDRFALKSSRVQDGMGLYTARRVRKGEKFGPFAGEKRMPEDDLNDMDYRLMWEVRGSKGEVLYILDATNPRHSNWLRFFVHEAPSOERKNLAAIQEGENIFYLAVDDIETDTTELLIGYLDSDVEAEEDDQALTMAREGK	145
gi	73983976	ref	XP_540970.2	-----MLGMYVDRFALKSSRVQDGMGLYTARRVRKGEKFGPFAGEKRMPEDDLNDMDYRLMWEVRGSKGEVLYILDATNPRHSNWLRFFVHEAPSOERKNLAAIQEGENIFYLAVDDIETDTTELLIGYLDSDVEAEEDDQALTMAREGK	145
gi	194667653	ref	XP_617668.4	-----MLGMYVDRFALKSSRVQDGMGLYTARRVRKGEKFGPFAGEKRMPEDDLNDMDYRLMWEVRGSKGEVLYILDATNPRHSNWLRFFVHEAPSOERKNLAAIQEGENIFYLAVDDIETDTTELLIGYLDSDVEAEEDDQALTMAREGK	145
gi	118090345	ref	XP_420628.2	-----MLGMYVDRFALKSSRVQDGMGLYTARRVRKGEKFGPFAGEKRMPEDDLNDMDYRLMWEVRGSKGEVLYILDATNPRHSNWLRFFVHEAPSOERKNLAAIQEGENIFYLAVDDIETDTTELLIGYLDSDVEAEEDDQALTMAREGK	299
gi	50539672	ref	NP_001002301.1	-----MLGMYVDRFALKSSRVQDGMGLYTARRVRKGEKFGPFAGEKRMPEDDLNDMDYRLMWEVRGSKGEVLYILDATNPRHSNWLRFFVHEAPSOERKNLAAIQEGENIFYLAVDDIETDTTELLIGYLDSDVEAEEDDQALTMAREGK	146

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



gi	124286828	ref	NP_081823.2	VDHSKGLAAGSKGHLG---CEDFACPCESSEFPSEVLEHQLSLOHQPTEKEKFCCKCGKFFPVKQALQRH-----FEQHRKACRGDARFVCKADSCGKRLKSKDALRRHQENVHTGD	259
gi	109472138	ref	XP_001072014.1	VDHSKGLAAGSKGHLG---CEDFACPCESSEFPSEVLEHQLSLOHQPTEKEKFCCKCGKFFPVKQALQRH-----FEQHRKACRGDARFVCKADSCGKRLKSKDALRRHQENVHTGD	352
gi	41349476	ref	NP_061169.2	VDHSKGLAAGSKGHLG---CEDFACPCESSEFPSEVLEHQLSLOHQPTEKEKFCCKCGKFFPVKQALQRH-----FEQHRKACRGDARFVCKADSCGKRLKSKDALRRHQENVHTGD	290
gi	114595868	ref	XP_001151366.1	VDHSKGLAAGSKGHLG---CEDFACPCESSEFPSEVLEHQLSLOHQPTEKEKFCCKCGKFFPVKQALQRH-----FEQHRKACRGDARFVCKADSCGKRLKSKDALRRHQENVHTGD	290
gi	73983976	ref	XP_540970.2	VDHSKGLAAGSKGHLG---CEDFACPCESSEFPSEVLEHQLSLOHQPTEKEKFCCKCGKFFPVKQALQRH-----FEQHRKACRGDARFVCKADSCGKRLKSKDALRRHQENVHTGD	290
gi	194667653	ref	XP_617668.4	VDHSKGLAAGSKGHLG---CEDFACPCESSEFPSEVLEHQLSLOHQPTEKEKFCCKCGKFFPVKQALQRH-----FEQHRKACRGDARFVCKADSCGKRLKSKDALRRHQENVHTGD	259
gi	118090345	ref	XP_420628.2	VDHSKGLAAGSKGHLG---CEDFACPCESSEFPSEVLEHQLSLOHQPTEKEKFCCKCGKFFPVKQALQRH-----FEQHRKACRGDARFVCKADSCGKRLKSKDALRRHQENVHTGD	447
gi	50539672	ref	NP_001002301.1	VDHSKGLAAGSKGHLG---CEDFACPCESSEFPSEVLEHQLSLOHQPTEKEKFCCKCGKFFPVKQALQRH-----FEQHRKACRGDARFVCKADSCGKRLKSKDALRRHQENVHTGD	292

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



gi	124286828	ref	NP_081823.2	PKRKLICVNCNRKCTSVSSLOEHRKTHEIFDQCECMKFFISANQLKRHMITHEKRPYNCEICNKSFKRLDQVGAHKVHISEDKPYCKLCKGKGFVFAHRNVKHNKHTHEERPFQCECKALFRTPFSLQRHLLIHNSERTFKCHHCDAT	409
gi	109472138	ref	XP_001072014.1	PKRKLICVNCNRKCTSVSSLOEHRKTHEIFDQCECMKFFISANQLKRHMITHEKRPYNCEICNKSFKRLDQVGAHKVHISEDKPYCKLCKGKGFVFAHRNVKHNKHTHEERPFQCECKALFRTPFSLQRHLLIHNSERTFKCHHCDAT	502
gi	41349476	ref	NP_061169.2	PKRKLICVNCNRKCTSVSSLOEHRKTHEIFDQCECMKFFISANQLKRHMITHEKRPYNCEICNKSFKRLDQVGAHKVHISEDKPYCKLCKGKGFVFAHRNVKHNKHTHEERPFQCECKALFRTPFSLQRHLLIHNSERTFKCHHCDAT	440
gi	114595868	ref	XP_001151366.1	PKRKLICVNCNRKCTSVSSLOEHRKTHEIFDQCECMKFFISANQLKRHMITHEKRPYNCEICNKSFKRLDQVGAHKVHISEDKPYCKLCKGKGFVFAHRNVKHNKHTHEERPFQCECKALFRTPFSLQRHLLIHNSERTFKCHHCDAT	440
gi	73983976	ref	XP_540970.2	PKRKLICVNCNRKCTSVSSLOEHRKTHEIFDQCECMKFFISANQLKRHMITHEKRPYNCEICNKSFKRLDQVGAHKVHISEDKPYCKLCKGKGFVFAHRNVKHNKHTHEERPFQCECKALFRTPFSLQRHLLIHNSERTFKCHHCDAT	440
gi	194667653	ref	XP_617668.4	PKRKLICVNCNRKCTSVSSLOEHRKTHEIFDQCECMKFFISANQLKRHMITHEKRPYNCEICNKSFKRLDQVGAHKVHISEDKPYCKLCKGKGFVFAHRNVKHNKHTHEERPFQCECKALFRTPFSLQRHLLIHNSERTFKCHHCDAT	409
gi	118090345	ref	XP_420628.2	PKRKLICVNCNRKCTSVSSLOEHRKTHEIFDQCECMKFFISANQLKRHMITHEKRPYNCEICNKSFKRLDQVGAHKVHISEDKPYCKLCKGKGFVFAHRNVKHNKHTHEERPFQCECKALFRTPFSLQRHLLIHNSERTFKCHHCDAT	597
gi	50539672	ref	NP_001002301.1	PKRKLICVNCNRKCTSVSSLOEHRKTHEIFDQCECMKFFISANQLKRHMITHEKRPYNCEICNKSFKRLDQVGAHKVHISEDKPYCKLCKGKGFVFAHRNVKHNKHTHEERPFQCECKALFRTPFSLQRHLLIHNSERTFKCHHCDAT	442

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



gi	124286828	ref	NP_081823.2	FKRKDTLNVHVQVVERHKKYRCCLCNKAFVPSVLRSHKHTHGEKEKICPYCGQKFASSTGLRVHIRSHTERPYPQCYCEKGFASKNDGLKMHIRHTREKPYKCEKAFSQRKGLDEHKRTHTEKPFQCDVCDLAFSLKMLIR	559
gi	109472138	ref	XP_001072014.1	FKRKDTLNVHVQVVERHKKYRCCLCNKAFVPSVLRSHKHTHGEKEKICPYCGQKFASSTGLRVHIRSHTERPYPQCYCEKGFASKNDGLKMHIRHTREKPYKCEKAFSQRKGLDEHKRTHTEKPFQCDVCDLAFSLKMLIR	652
gi	41349476	ref	NP_061169.2	FKRKDTLNVHVQVVERHKKYRCCLCNKAFVPSVLRSHKHTHGEKEKICPYCGQKFASSTGLRVHIRSHTERPYPQCYCEKGFASKNDGLKMHIRHTREKPYKCEKAFSQRKGLDEHKRTHTEKPFQCDVCDLAFSLKMLIR	590
gi	114595868	ref	XP_001151366.1	FKRKDTLNVHVQVVERHKKYRCCLCNKAFVPSVLRSHKHTHGEKEKICPYCGQKFASSTGLRVHIRSHTERPYPQCYCEKGFASKNDGLKMHIRHTREKPYKCEKAFSQRKGLDEHKRTHTEKPFQCDVCDLAFSLKMLIR	590
gi	73983976	ref	XP_540970.2	FKRKDTLNVHVQVVERHKKYRCCLCNKAFVPSVLRSHKHTHGEKEKICPYCGQKFASSTGLRVHIRSHTERPYPQCYCEKGFASKNDGLKMHIRHTREKPYKCEKAFSQRKGLDEHKRTHTEKPFQCDVCDLAFSLKMLIR	590
gi	194667653	ref	XP_617668.4	FKRKDTLNVHVQVVERHKKYRCCLCNKAFVPSVLRSHKHTHGEKEKICPYCGQKFASSTGLRVHIRSHTERPYPQCYCEKGFASKNDGLKMHIRHTREKPYKCEKAFSQRKGLDEHKRTHTEKPFQCDVCDLAFSLKMLIR	559
gi	118090345	ref	XP_420628.2	FKRKDTLNVHVQVVERHKKYRCCLCNKAFVPSVLRSHKHTHGEKEKICPYCGQKFASSTGLRVHIRSHTERPYPQCYCEKGFASKNDGLKMHIRHTREKPYKCEKAFSQRKGLDEHKRTHTEKPFQCDVCDLAFSLKMLIR	747
gi	50539672	ref	NP_001002301.1	FKRKDTLNVHVQVVERHKKYRCCLCNKAFVPSVLRSHKHTHGEKEKICPYCGQKFASSTGLRVHIRSHTERPYPQCYCEKGFASKNDGLKMHIRHTREKPYKCEKAFSQRKGLDEHKRTHTEKPFQCDVCDLAFSLKMLIR	592

.....610.....620.....630.....640.....650.....660.....670.....680.....690.....700.....710.....720.....730.....740.....750



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gi|124286828|ref|NP_081823.2|      :: * . . . * . . . * :
HKMTHNPNRPMAECHFKKKFTRNDYLVKVMNDNIHGVADS 599
gi|109472138|ref|XP_001072014.1| -RMRVLPFSTFGLPTPSSVGFLTLPPPAELGFKGGSG- 690
gi|41349476|ref|NP_061169.2|      HKMTHNPNRPLAECQFCHKKFTRNDYLVKVMNDNIHGVADS 630
gi|114595868|ref|XP_001151366.1|  HKMTHNPNRPLAECQFCHKKFTRNDYLVKVMNDNIHGVADS 630
gi|73983976|ref|XP_540970.2|      HKMTHNPNRPLAECQFCHKKFTRNDYLVKVMNDNIHGEADS 630
gi|194667653|ref|XP_617668.4|     HKMTHNPNRPLAECQFCHKKFTRNDYLVKVMNDNIHGEADS 599
gi|118090345|ref|XP_420628.2|     HKLTHNPNRPMAECSLCHKKFTRNDYLVKVMENVHGEADS 787
gi|50539672|ref|NP_001002301.1|  HKLTHNPNRPMAECSLCHKKFTRNDYLVKVMENVHGEADS 632
.....760.....770.....780.....790

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