

lmo1013 vs LMOSA_19040 (ScottA) BLASTP alignment

Query= EGJ24516.1 [locustag:LMOSA_19040]

Length=293

Sequences producing significant alignments:	Score (Bits)	E Value
lmo1013	566	0.0

>lmo1013
Length=281

Score = 566 bits (1460), Expect = 0.0, Method: Compositional matrix adjust.
Identities = 279/281 (99%), Positives = 281/281 (100%), Gaps = 0/281 (0%)

Query	13	MNLLKKWFSSIDWDQFWNHIIISVGIKIAILIALYFIFRVVGNKIIRSFFRKYRQQQAVSV	72
		MNLLKKWFSSIDWDQFWNHIIISVGIKIAILIALYFIFRV+GNKIIRSFFRKYRQQQAVSV	
Sbjct	1	MNLLKKWFSSIDWDQFWNHIIISVGIKIAILIALYFIFRVIGNKIIRSFFRKYRQQQAVSV	60
Query	73	GRADTLESLISNFYGYVLFFFTFAILLQNFMDVTAIISAGVASLAIAFGAQGLVSDVVT	132
		GRADTLESLISNFYGYVLFFFTFAILLQNFMDVTAIISAGVASLAIAFGAQGLVSDVVT	
Sbjct	61	GRADTLESLISNFYGYVLFFFTFAILLQNFMDVTAIISAGVASLAIAFGAQGLVSDVVT	120
Query	133	GFFILLERQLDVGDTITIGLVNGTVEALGLRRTTQVRDFDGLHFIPNRQIMVVSNHSGN	192
		GFFILLERQLDVGDTITIGLVNGTVEALGLRRTTQVRDFDGLHFIPNRQIMVVSNHSGN	
Sbjct	121	GFFILLERQLDVGDTITIGLVNGTVEALGLRRTTQVRDFDGLHFIPNRQIMVVSNHSGN	180
Query	193	MRVMVDIQISPHEDEPEKAIKIIGEVCDAKENKNIVEPPVVLGVQNI DATNMIIIRVVGK	252
		MRVMVDIQISPHEDEPEKAIKIIGEVCDAKENKNIVEPPVVLGVQNI DATNMIIIRVVGK	
Sbjct	181	MRVMVDIQISPHEDEPEKAIKIIGEVCDAKENKNIVEPPVVLGVQNI DATNMIIIRVVGK	240
Query	253	AVNGEQYSVQRDLLKDIREALAENEIELPLNFVSTFGPNNN	293
		AVNGEQYSVQRDLLKDIREALAEN+IELPLNFVSTFGPNNN	
Sbjct	241	AVNGEQYSVQRDLLKDIREALAENKIELPLNFVSTFGPNNN	281

lmo1013 vs OCPFDLNE_01076 (RO15) BLASTP alignment

Query= OCPFDLNE_01076

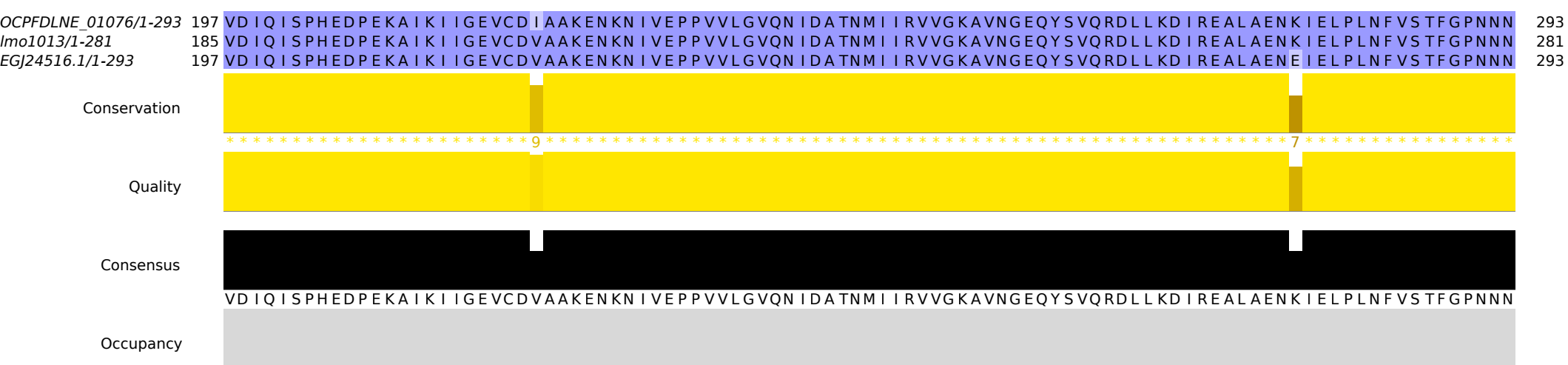
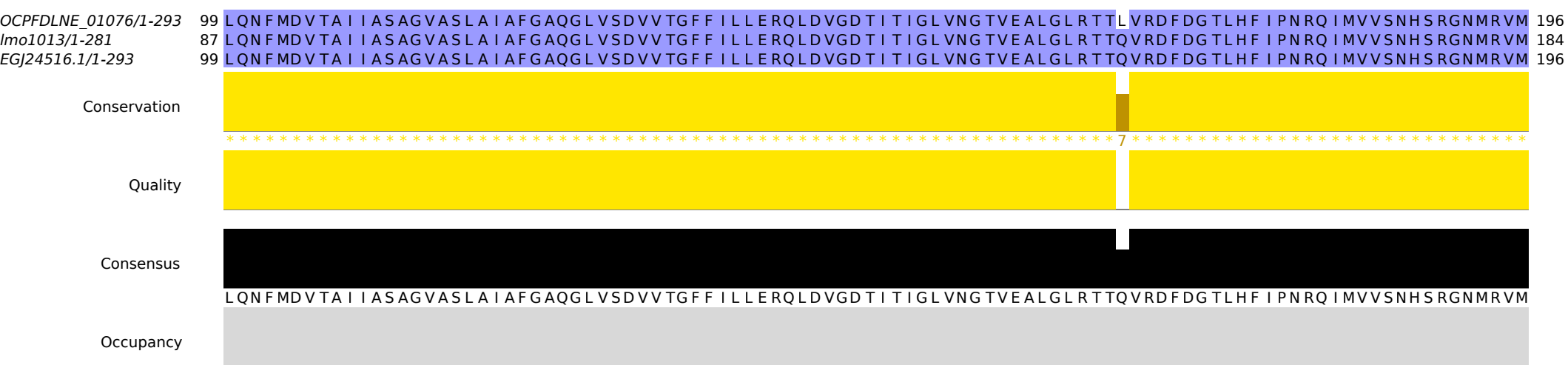
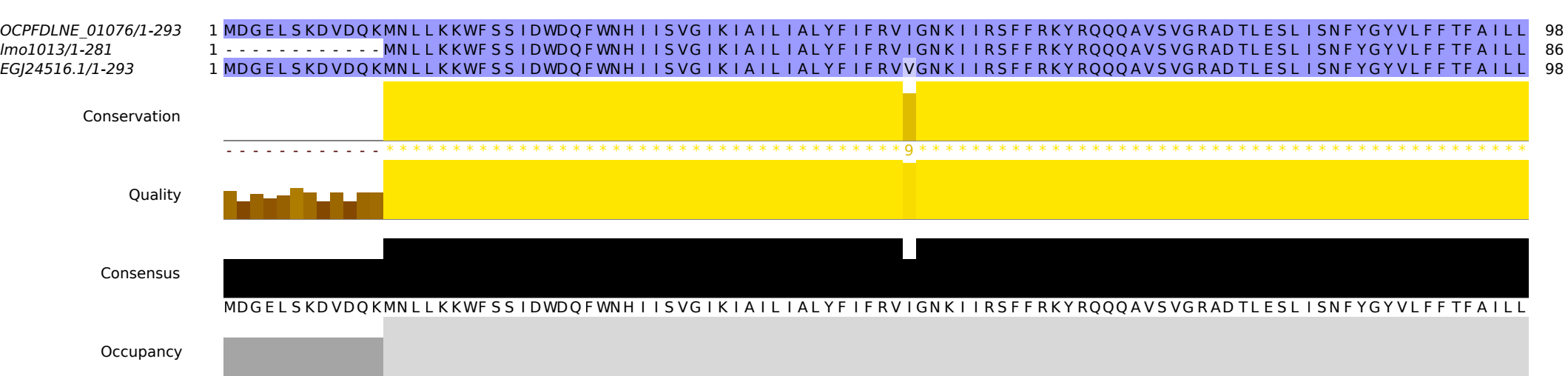
Length=293

Sequences producing significant alignments:	Score (Bits)	E Value
lmo1013	565	0.0

>lmo1013
Length=281

Score = 565 bits (1455), Expect = 0.0, Method: Compositional matrix adjust.
Identities = 279/281 (99%), Positives = 280/281 (99%), Gaps = 0/281 (0%)

Query	13	MNLLKKWFSSIDWDQFWNHIIISVGIKIAILIALYFIFRVIGNKIIRSFFRKYRQQQAVSV	72
		MNLLKKWFSSIDWDQFWNHIIISVGIKIAILIALYFIFRVIGNKIIRSFFRKYRQQQAVSV	
Sbjct	1	MNLLKKWFSSIDWDQFWNHIIISVGIKIAILIALYFIFRVIGNKIIRSFFRKYRQQQAVSV	60
Query	73	GRADTLESLISNFYGYVLFFFTFAILLQNFMDVTAIISAGVASLAIAFGAQGLVSDVVT	132
		GRADTLESLISNFYGYVLFFFTFAILLQNFMDVTAIISAGVASLAIAFGAQGLVSDVVT	
Sbjct	61	GRADTLESLISNFYGYVLFFFTFAILLQNFMDVTAIISAGVASLAIAFGAQGLVSDVVT	120
Query	133	GFFILLERQLDVGDTITIGLVNGTVEALGLRRTTLVRDFDGLHFIPNRQIMVVSNHSGN	192
		GFFILLERQLDVGDTITIGLVNGTVEALGLRRTT VRDFDGLHFIPNRQIMVVSNHSGN	
Sbjct	121	GFFILLERQLDVGDTITIGLVNGTVEALGLRRTTQVRDFDGLHFIPNRQIMVVSNHSGN	180
Query	193	MRVMVDIQISPHEDEPEKAIKIIGEVCDAKENKNIVEPPVVLGVQNI DATNMIIIRVVGK	252
		MRVMVDIQISPHEDEPEKAIKIIGEVCDAKENKNIVEPPVVLGVQNI DATNMIIIRVVGK	
Sbjct	181	MRVMVDIQISPHEDEPEKAIKIIGEVCDAKENKNIVEPPVVLGVQNI DATNMIIIRVVGK	240
Query	253	AVNGEQYSVQRDLLKDIREALAENKIELPLNFVSTFGPNNN	293
		AVNGEQYSVQRDLLKDIREALAENKIELPLNFVSTFGPNNN	
Sbjct	241	AVNGEQYSVQRDLLKDIREALAENKIELPLNFVSTFGPNNN	281



lmo2229 vs LMOA_2530 (ScottA) BLASTP alignment

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>lmo2229
Length=714

Score = 1447 bits (3746), Expect = 0.0, Method: Compositional matrix adjust.
Identities = 711/714 (99%), Positives = 712/714 (99%), Gaps = 2/714 (0%)

Query 1 MDKFKQQLIKYLKLFVGGFIGKWLKSGWQKFRFRWKNKHIGKIFLLAGLVFLLSFIIYLVI 60
MDKFKQQLIKYLKLFVGGFIGKWL+KGWQKFRFRWKNKHIGKIFLLAGLVFLLSFIIYLVI
Sbjct 1 MDKFKQQLIKYLKLFVGGFIGKWLKSGWQKFRFRWKNKHIGKIFLLAGLVFLLSFIIYLVI 60

Query 61 VAKSADIDALKKGGLESATIIYDKDGDKAGELSSTDATFVSDIKISKNLQNAVVSIEDRKF 120
VAKSADIDALKKGGLESATIIYDKDGDKAGELSSTDATFVSDIKISKNLQNAVVSIEDRKF
Sbjct 61 VAKSADIDALKKGGLESATIIYDKDGDKAGELSSTDATFVSDIKISKNLQNAVVSIEDRKF 120

Query 121 YEHKGFDLKGIARAGVNLVTSGGISGGGSTITQQLAKNALLTQEQTFRKAKEIFMAREI 180
YEHKGFDLKGIARAGVNLVTSGGISGGGSTITQQLAKNALLTQEQTFRKAKEIFMAREI
Sbjct 121 YEHKGFDLKGIARAGVNLVTSGGISGGGSTITQQLAKNALLTQEQTFRKAKEIFMAREI 180

Query 181 EKTYSKDEIMEMYLNRSYFGNGEWGVENASLKYFGKSAADLNPEAATIAGLLQAPSAYD 240
EKTYSKDEIMEMYLNRSYFGNGEWGVENASLKYFGKSAADLNPEAATIAGLLQAPSAYD
Sbjct 181 EKTYSKDEIMEMYLNRSYFGNGEWGVENASLKYFGKSAADLNPEAATIAGLLQAPSAYD 240

Query 241 PYQHIDKATNRRNMVLNAMVETGTISKAEGDKYKATKIVLNDQSKDPLANKYPWYVDAVI 300
PYQHIDKATNRRNMVLNAMVETGTISKAEGDKYKATKIVLNDQSKDPLANKYPWYVDAVI
Sbjct 241 PYQHIDKATNRRNMVLNAMVETGTISKAEGDKYKATKIVLNDQSKDPLANKYPWYVDAVI 300

Query 301 NEAVNEADITQDEIMQKGYKIYTELDQNYQTSLENYNNDGLFPSNANDGTLVQSGAVLM 360
NEAVNEADITQDEIMQKGYKIYTELDQNYQTSLENYNNDGLFPSNANDGTLVQSGAVLM
Sbjct 301 NEAVNEADITQDEIMQKGYKIYTELDQNYQTSLENYNNDGLFPSNANDGTLVQSGAVLM 360

Query 361 DPATGGIRALVGGGRGEHVFRGFNRATQMKAQPGSTMKPLAVYTPALQSGYDVDSMLKDEK 420
DPATGGIRALVGGGRGEHVFRGFNRATQMKAQPGSTMKPLAVYTPALQSGYDVDSMLKDEK
Sbjct 361 DPATGGIRALVGGGRGEHVFRGFNRATQMKAQPGSTMKPLAVYTPALQSGYDVDSMLKDEK 420

Query 421 ITYKGNYPPTNVGGVYSGEVPMYKAVANSINAPAVWLLDQIGIDKGKVSVEKFGITVPEK 480
ITYKGNYPPTNVGGVYSGEVPMYKAVANSINAPAVWLLDQIGIDKGKVSVEKFGITVPEK
Sbjct 421 ITYKGNYPPTNVGGVYSGEVPMYKAVANSINAPAVWLLDQIGIDKGKVSVEKFGITVPEK 480

Query 481 DRTLGLALGGMSKASPVEMATAYATFANNGAKPESHIITKIVDPSGNTVYENVPKTKQI 540
DRTLGLALGGMSKASPVEMATAYATFANNGAKPESHIITKIVDPSGNTVYENVPKTKQI
Sbjct 481 DRTLGLALGGMSKASPVEMATAYATFANNGAKPESHIITKIVDPSGNTVYENVPKTKQI 540

Query 541 ISETVSNEMTSMLLDVINTGTGQSAAVSGHEMAGKTGSTQVPFDDTSGTKDQWVFGYTPN 600
ISETVSNEMTSMLLDVINTGTGQSAAVSGHEMAGKTGSTQVPFDDTSGTKDQWVFGYTPN
Sbjct 541 ISETVSNEMTSMLLDVINTGTGQSAAVSGHEMAGKTGSTQVPFDDTSGTKDQWVFGYTPN 600

Query 601 LVGAVWMGYDKTDKEHYLTTTSSAGVSSLAHYVMNSGLQYQKSADFSTKSAAQETAACKK 659
LVGAVWMGYDKTDKEHYLTTTSSAGVSSLAHYVMNSGLQYQKSADFSTKSAAQETAACKK
Sbjct 601 LVGAVWMGYDKTDKEHYLTTTSSAGVSSLAHYVMNSGLQYQKSADFSTKSAAQETAACKK 660

Query 660 -EEKEKNSGSDFWSGVKEKADEAGETIKKGADKVKEFGGKVSVDGIGNLIDSIGN 712
EEKEKNSGSDFWSGVKEKADEAGETIKKGADKVKEFGGKVSVDGIGNLIDSIGN
Sbjct 661 EEEKEKNSGSDFWSGVKEKADEAGETIKKGADKVKEFGGKVSVDGIGNLIDSIGN 714
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lmo2229 vs OCPFDLNE_02389 (RO15) BLASTP alignment

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>lmo2229
Length=714

Score = 1457 bits (3772), Expect = 0.0, Method: Compositional matrix adjust.
Identities = 714/714 (100%), Positives = 714/714 (100%), Gaps = 0/714 (0%)

Query 1 MDKFKQQLIKYLKLFVGGFIGKWLKSGWQKFRFRWKNKHIGKIFLLAGLVFLLSFIIYLVI 60
MDKFKQQLIKYLKLFVGGFIGKWLKSGWQKFRFRWKNKHIGKIFLLAGLVFLLSFIIYLVI
Sbjct 1 MDKFKQQLIKYLKLFVGGFIGKWLKSGWQKFRFRWKNKHIGKIFLLAGLVFLLSFIIYLVI 60

Query 61 VAKSADIDALKKGGLESATIIYDKDGDKAGELSSTDATFVSDIKISKNLQNAVVSIEDRKF 120
VAKSADIDALKKGGLESATIIYDKDGDKAGELSSTDATFVSDIKISKNLQNAVVSIEDRKF
Sbjct 61 VAKSADIDALKKGGLESATIIYDKDGDKAGELSSTDATFVSDIKISKNLQNAVVSIEDRKF 120

Query 121 YEHKGFDLKGIARAGVNLVTSGGISGGGSTITQQLAKNALLTQEQTFRKAKEIFMAREI 180
YEHKGFDLKGIARAGVNLVTSGGISGGGSTITQQLAKNALLTQEQTFRKAKEIFMAREI
Sbjct 121 YEHKGFDLKGIARAGVNLVTSGGISGGGSTITQQLAKNALLTQEQTFRKAKEIFMAREI 180

Query 181 EKTYSKDEIMEMYLNRSYFGNGEWGVENASLKYFGKSAADLNPEAATIAGLLQAPSAYD 240
EKTYSKDEIMEMYLNRSYFGNGEWGVENASLKYFGKSAADLNPEAATIAGLLQAPSAYD
Sbjct 181 EKTYSKDEIMEMYLNRSYFGNGEWGVENASLKYFGKSAADLNPEAATIAGLLQAPSAYD 240

Query 241 PYQHIDKATNRRNMVLNAMVETGTISKAEGDKYKATKIVLNDQSKDPLANKYPWYVDAVI 300
PYQHIDKATNRRNMVLNAMVETGTISKAEGDKYKATKIVLNDQSKDPLANKYPWYVDAVI
Sbjct 241 PYQHIDKATNRRNMVLNAMVETGTISKAEGDKYKATKIVLNDQSKDPLANKYPWYVDAVI 300

Query 301 NEAVNEADITQDEIMQKGYKIYTELDQNYQTSLENYNNDGLFPSNANDGTLVQSGAVLM 360
NEAVNEADITQDEIMQKGYKIYTELDQNYQTSLENYNNDGLFPSNANDGTLVQSGAVLM
Sbjct 301 NEAVNEADITQDEIMQKGYKIYTELDQNYQTSLENYNNDGLFPSNANDGTLVQSGAVLM 360

Query 361 DPATGGIRALVGGGRGEHVFRGFNRATQMKAQPGSTMKPLAVYTPALQSGYDVDSMLKDEK 420
DPATGGIRALVGGGRGEHVFRGFNRATQMKAQPGSTMKPLAVYTPALQSGYDVDSMLKDEK
Sbjct 361 DPATGGIRALVGGGRGEHVFRGFNRATQMKAQPGSTMKPLAVYTPALQSGYDVDSMLKDEK 420

Query 421 ITYKGNYPPTNVGGVYSGEVPMYKAVANSINAPAVWLLDQIGIDKGKVSVEKFGITVPEK 480
ITYKGNYPPTNVGGVYSGEVPMYKAVANSINAPAVWLLDQIGIDKGKVSVEKFGITVPEK
Sbjct 421 ITYKGNYPPTNVGGVYSGEVPMYKAVANSINAPAVWLLDQIGIDKGKVSVEKFGITVPEK 480

Query 481 DRTLGLALGGMSKASPVEMATAYATFANNGAKPESHIITKIVDPSGNTVYENVPKTKQI 540
DRTLGLALGGMSKASPVEMATAYATFANNGAKPESHIITKIVDPSGNTVYENVPKTKQI
Sbjct 481 DRTLGLALGGMSKASPVEMATAYATFANNGAKPESHIITKIVDPSGNTVYENVPKTKQI 540

Query 541 ISETVSNEMTSMLLDVINTGTGQSAAVSGHEMAGKTGSTQVPFDDTSGTKDQWVFGYTPN 600
ISETVSNEMTSMLLDVINTGTGQSAAVSGHEMAGKTGSTQVPFDDTSGTKDQWVFGYTPN
Sbjct 541 ISETVSNEMTSMLLDVINTGTGQSAAVSGHEMAGKTGSTQVPFDDTSGTKDQWVFGYTPN 600

Query 601 LVGAVWMGYDKTDKEHYLTTTSSAGVSSLAHYVMNSGLQYQKSADFSTKSAAQETAACKK 660
LVGAVWMGYDKTDKEHYLTTTSSAGVSSLAHYVMNSGLQYQKSADFSTKSAAQETAACKK
Sbjct 601 LVGAVWMGYDKTDKEHYLTTTSSAGVSSLAHYVMNSGLQYQKSADFSTKSAAQETAACKK 660

Query 661 EEEKEKNSGSDFWSGVKEKADEAGETIKKGADKVKEFGGKVSVDGIGNLIDSIGN 714
EEEKEKNSGSDFWSGVKEKADEAGETIKKGADKVKEFGGKVSVDGIGNLIDSIGN
Sbjct 661 EEEKEKNSGSDFWSGVKEKADEAGETIKKGADKVKEFGGKVSVDGIGNLIDSIGN 714
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