

		10	20	30	40	50	60
LeNAS	Sequence	-----MV-----	-----PNSN P-----	-----V E V C E-----	EQ E R L E N L S		
chloronerva	Sequence	-----MV-----	-----PNSN P-----	-----V E V C E-----	EQ E R L E N L S		
AtNAS 1	Sequence	-----MA-----	-----ENN L-----	-----V K Q I D-----	D Q E K L K L K		
AtNAS 2	Sequence	-----MA-----	-----ENN L-----	-----V K Q I M D-----	N Q E N L E L K		
AtNAS 3	Sequence	-----MG-----	-----D E Q-----	-----Q T I C D-----	E K E K L E L K		
AtNAS 4	Sequence	-----MGY-----	-----D D Q-----	-----N K I C D-----	E K E K L E T L K		
OsNAS 1	Sequence	-----ME-----	-----A N Q E-----	-----VA A E E A G A G-----	A A E K L P L S		
OsNAS 2	Sequence	-----ME-----	-----A N Q E-----	-----VA A E E A G A G-----	A A E K L P L S		
OsNAS 3	Sequence	--MTVEVEAV TMAKE-----	-----E P E E E E V-----	-----I E K E E K T G A-----	A A E G K L P L S		
HvNAS1	Sequence	-----MD-----	-----A N K E-----	-----VA A I E E A G I Q-----	A A A E L P L S		
PtNAS1	Sequence	-----MASPRN-----	---VDFESQI PADL-----	-----I A R M R I H-----	A S E N L D L R		
PtNAS2	Sequence	-----MAALQI-----	---SN E S Q I S T E L-----	-----I A R V T Q I H-----	A S E K L S L R		
PtNAS3	Sequence	-----MV-----	-----K E-----	-----P-----	-----Q V C D-----	E Q E S L E L K	
PtNAS4	Sequence	-----MG-----	-----E E L-----	-----I E V C E I I-----	D K L E R L E N L N		
		70	80	90	100	110	120
LeNAS	Sequence	P K D V N V L L	DLV H T M M N	I D S K C	Q K I E I R S H L	I K C Q A E G L	L E S F K I S
chloronerva	Sequence	P K D V N V L L	DLV H T M M N	I D S K C	Q K I E I R S H L	I K C Q A E G L	L E S F K I S
AtNAS 1	Sequence	P K N V D T L L R	Q L V S T L T D	T N D T N M C	E E V K D R A N L	I K C E A E G Y	L E Q F S T I G
AtNAS 2	Sequence	P K N V D T L L R	Q L V S T L T D	T N D T E I H D	E K V K D R S H L	I K C E A E G Y	L E Q F S A I G
AtNAS 3	Sequence	P E D V N I L L R	Q L V S T I T N	N D T M C	D R V E I R L N L	I K I C L A E G H	L E N F S S I T
AtNAS 4	Sequence	P C E D V D T L L K	Q L V S T I T N	N D T M S	E N I E I R S N L	I K I C E A E G Y	L E H F S S I T
OsNAS 1	Sequence	P A E V D A L L	DLV T A V V A S	E V D A K G	P E A T A R E E L	I R C S A A E G H	L E A Y A D M A
OsNAS 2	Sequence	P A E V D A L L	DLV T A V V A S	E V D A K G	P E A T A R E E L	I R C S A A E G H	L E A Y A D M A
OsNAS 3	Sequence	P P E V N A L L	ELV M T I T S	S V D E Q G	A E A D R G R L	I R C A D A E G H	L E A Y D V A
HvNAS1	Sequence	P P E V D R L L	DLV T A V V A S	E V D T K S	P E H R R E A L	I R C S A A E G K	L E A Y A D L A
PtNAS1	Sequence	P T Q V N S L L	H L V-----	-----	E E R E S L	I N C R A E G L	L E L E A T F I
PtNAS2	Sequence	P K Q V N S L L S	N L V K L I L S	S D I T A P	E E V A R E S L	I N C H A E G L	L E L E A T F S
PtNAS3	Sequence	P K D V D M L L	Q L V L T I T N	I D N K C	K K I E R S K L	I R C E A E G H	L E S F S A I G
PtNAS4	Sequence	P K Q V N S L L L	Q L V Q T M S Q C	H D I T K N	E R V A I R C K L	I K C K A E G L	L E I F A T L I G
		130	140	150	160	170	180
LeNAS	Sequence	Y E N---P L Q	H I F P Y F D N	Y I L L L E N	I L T K N T T-N I	P-K K I A F I G S	G P P T S L L
chloronerva	Sequence	Y E N---P L Q	H I F P Y F D N	Y I L L L E N	I L T K N T T-N I	P-K K I A F I G S	G P P T S L L
AtNAS 1	Sequence	L Q E D Q N P L D	H I F P Y S N	Y L L L G K E F D	L S Q H S S-H V	P-T K I A F I G S	G P M P T S I
AtNAS 2	Sequence	F E D---N P L N	H I F P Y N N	Y L L L G K E F D	L S Q H T T-H V	P-T K A F I G S	G P M P T S I
AtNAS 3	Sequence	Y Q D---N P L H	N I F P Y N N	Y L L L G K E F D	L E Q N L N G F V	P-K S A F I G S	G P P T S I
AtNAS 4	Sequence	F E D---N P L H	N L F P Y N N	Y L L L K E F D	L E Q N L N G F V	P-R T A F I G S	G P P T S V L
OsNAS 1	Sequence	A F D N---P L D	A R F P Y G N	Y V N L K E D	L V R Y V P G I A	P-T R A F I G S	G P P F S S L
OsNAS 2	Sequence	A F D N---P L D	A R F P Y G N	Y V N L K E D	L V R Y V P G I A	P-T R A F I G S	G P P F S S L
OsNAS 3	Sequence	A H D N---P L D	A L F P Y F N N	Y I Q L A Q E F A	L A R H L P A A P	P P S R L A F L G S	G P P T S S L
HvNAS1	Sequence	T F D N---P L D	A G L F P Y S N	Y V N L R E E	L A R H V P G I A	P-A R A F I G S	G P P F S S L
PtNAS1	Sequence	E T P Q---P L N	S H L F P Y G N	Y V L L A S E R	I L H E N G V-V Q	P-K K A F I G S	G P M P T S F I M
PtNAS2	Sequence	K I H Q---P L N	N N L F P Y G N	Y V L L A N I E R	I L N E S V V-L Q	P-K K A F I G S	G P M P T S F I M
PtNAS3	Sequence	Y E N---P L D	N V F P Y S N	Y L L L H E F N	I L K Q H C T-N V	P-S K A F I G S	G P P T S S I
PtNAS4	Sequence	H D K---P L N	K I I F P Y S N	Y L L L Q V E F S	M L N K I C S-R V	P-K H I A F I G S	G P P T S I I
		190	200	210	220	230	240
LeNAS	Sequence	A T K H K T C F	N N Y D D V D N	F M A S A A A-A	D P D M S R M T F	H T A D M D T C	A L K D D F L
chloronerva	Sequence	A T K H K T C F	N N Y D D V D N	F M A S A A A-A	D P D M S R M T F	H T A D M D T C	A L K D D F L
AtNAS 1	Sequence	A K F H P N T F	N N F D D S H N	T L A S N S-R	D P D K R M I F	H T T D L N A T E	G L D Q Y D F L
AtNAS 2	Sequence	A K F H P N T F	N N F D D S H N	T L A S N S-R	D S D K R M I F	H T T D L N A K E	G L D Q Y D F L
AtNAS 3	Sequence	A S F H K D I F	N N F D D P S N	S L A S L S-S	D P D I Q R M F F	H T V D I M D T E	S L K S F D F L
AtNAS 4	Sequence	A S S H K D S I F	N N F D D P S N	M V A A R S-S	D P D I Q R M F F	H T V D I M D T E	S L K G F D F L

OsNAS 1	Sequence	AAHH PD A V F D N Y D R C G A N E R A R R F R G A D E G G A R M A F N T A D A T L I G E L G A D F L
OsNAS 2	Sequence	AAHH PD A V F D N Y D R C G A N E R A R R F R G A D E G G A R M A F N T A D A T L I G E L G A D F L
OsNAS 3	Sequence	AA R H P A A S F D N Y D C A D N R R A S R R A D R D A R M A F N T S D A H T D L A A D F L
HvNAS1	Sequence	AA H H P E T Q F D N Y D L C G A N E R A R K F G A T A D G V G A R M S F N T A D A D L I Q E L G A D F L
PtNAS1	Sequence	A I H H M K F H F D N F D V E A N G V A R Q I V S D A E E K R M K F E T C D I V N K E K L S E T D C I F L
PtNAS2	Sequence	A T H H M K F H F D N F D V E A N D V A R Q I A S D V E E K R M K F E T G D I M E K E K L S E T D C I F L
PtNAS3	Sequence	A C N H T A S F D N Y D D P S N S K A L Q T S H P D S R M F F N T T D I M D T S E L Q E F D F L
PtNAS4	Sequence	A T N H R T C F D N F D D P S E N A K A I Q T S S D S E E K R M F F N T A D I M N T S S S L K Q T E F L
		250 260 270 280 290 300
LeNAS	Sequence	A A L V G D K E D K K K V D F A K Y S I G T M L R S A H A R S Y V L D R D R P E L S Y
chloronerva	Sequence	A A L V G D K E D K K K V D F A K Y S I G T M L R S A H A R S Y V L D R D R P E L S Y
AtNAS 1	Sequence	A A L V G D K E S K K A E E E K H S I G V M L R S A H A L R S Y I D S S D K Q L L T I Y
AtNAS 2	Sequence	A A L V G D K E S K K A E E E K H S I G V V M L R S A H L R S Y I D S C D K E L T I Y
AtNAS 3	Sequence	A A L V G N K E E K K K E E E Q K H S I G V M L R S A H P R S Y I E C D Q E L S I Y
AtNAS 4	Sequence	A A L V G D K E K K K V E E E K H S I G L M L R S A H P R S Y I E C D E E L S Y
OsNAS 1	Sequence	A A L V G A A E E K A G A A G A H A D G A A V V R S A H A G Y I D E D V R R G D L A C
OsNAS 2	Sequence	A A L V G A A E E K A G A A G A H A D G A A V V R S A H A G Y I D L E D I R R G D L A Y
OsNAS 3	Sequence	A A L V G A A E E K A R M V E G H A D G A A V V R S A H A G Y V D E E I R R G D L A H
HvNAS1	Sequence	A A L V G A A E E K A K A A G A H V E G S V V R S A R P E G Y I D E D I R R G E L A H
PtNAS1	Sequence	A A L V G L N D E K L I L S R R K Y K E G G I L V R S A N V I D E D I R R G E L L I F
PtNAS2	Sequence	A A L V G S A D K K I L G I R K Y K E G G V L V R S A K R S Y V I E E Q D V L E L L I F
PtNAS3	Sequence	A A L V G D K E E K K K D E A K Q A G I M L R S A H R S Y V I D C D R E L S F
PtNAS4	Sequence	A A L V G D R E E K R R K K A D R I N G T L L M R S A N R S Y V I D C D Q E I L S F
		310 320 330 340 350 360
LeNAS	Sequence	H P T D E V N S V A R K L P V P S V P L L D G L G A Y V L S
chloronerva	Sequence	H P T D E V N S V A R K L P V P S V P L L D G L G A Y V L S
AtNAS 1	Sequence	H P T D D V N S V A R K L G G P T T P G V N G T R G C M F M C N
AtNAS 2	Sequence	H P S D D V N S V A R K L G G S N G A R G S Q I G R C V M C N
AtNAS 3	Sequence	H P T D D V N S V S K K H P V V S I G N V G G P N S C L L K C N
AtNAS 4	Sequence	H P T D E V N S I V S R K L G E D A N G V V H D H I D Q A S D L A C N
OsNAS 1	Sequence	H P E D E V N S V V A K V G A A A A A A A A R R D E L A D S R G V V L P V V G P S
OsNAS 2	Sequence	H P D D E V N S V V A R K A D P R R G G G L A G A R G A V P V S P C
OsNAS 3	Sequence	H P E G E V N S V A R K K P P V A A P A L E G G D A H A H G H G A V V S R C
HvNAS1	Sequence	H P E G E V N S V V A K A V E A Q L S G P Q N G D A H A R G A V P L V S P C N
PtNAS1	Sequence	H P T N D V N S V L V R K L P V P S V P L L D G L G A Y V L S
PtNAS2	Sequence	H P T N D V N S V L L R K L P V P S V P L L D G L G A Y V L S
PtNAS3	Sequence	H P S D E V N S V A R K Y S L P I N S I D Q Q Q T G L G S M I V L N
PtNAS4	Sequence	H P S D D V N S V A R K H S Q G G Q S D
		370 380 390 400 410 420
LeNAS	Sequence	K C A C A E I H A F N L N K M N L V E F A L E E
chloronerva	Sequence	K C A C A E I H A F N L N K M N L V E F A L E E
AtNAS 1	Sequence	C S K I H A I M N N R G K K N M I E E F S A I E
AtNAS 2	Sequence	C S K V H A I L N N R G M E K N L I E E Y S A I E
AtNAS 3	Sequence	C S K T H A K M N K N M M I E E F G A R E E Q L S
AtNAS 4	Sequence	C S K I H V I M N K K K S I I E E F A G A N E E Q L T
OsNAS 1	Sequence	T C C K V E A S A V E K A E F A A N K E L S V
OsNAS 2	Sequence	K C C K M E A A A G A F Q K A E F A A K R L S V
OsNAS 3	Sequence	Q R C E M E A R A H Q K M E D M S A M E K L P S S
HvNAS1	Sequence	F S T K M E A S A L E K S E E L T A K E L A F
PtNAS1	Sequence	P V F
PtNAS2	Sequence	P A F
PtNAS3	Sequence	K C C E I L A F N P L S H V T M V E E L A V E E Q H S
PtNAS4	Sequence	G Y E P V M H A S R