

A

Rana3 1 MPRPKEIQEQLRKKVIEIYQSGKGYKAI SKALGIQRTTVRAI IHKWRRHG
Rana4 1 MPRPKEIQEQLRKKVIEIYQSGKGYKAI SKALGIQRTTVRAI IHKWRRHG
Rana10 1 MPRPKEIQEQLRKKVIEIYQSGKGYKAI SKALGIQRTTVRAI IHKWRRHG
Rana7 1 MPRPKEIQEQLRKKVIEIYQSGKGYKAI SKALGIQRTTVRAI MHK-RRHG
Rana9 1 MPRPKEIQEQLRKKVIEIYQSGKGYKAI SKALGIQRTTVRAI IHKWRRHG
Rana6 1 MPRPKEIQEQLRKKVIEIYQSGKGYKAI SKALGIQRTTVRAI IHKWRRHG
Rana2 1 MPRPKEIQEQLRKKVIEIYQSGKGYKAI SKALGIQRTTVRAI IHKWRRHG
Rana1 1 MPRPKEIQEQLRKKVIEIYQSGKGYKAI SKALGIQRTTVRAI IHKWRRHG
Rana8 1 MPRPKEIQEQLRKKVIEIYQSGKGYKAI SKALGIQOPTVRAI IHKWEGHE
Rana5 1 MPRPKEIQEQLRKKVIXIYQSGKGYKAI FKALXIQRRTTVRAI IXXWXXHG
FP 1 MPRPKEIQEQLRKKVIEIYQSGKGYKAI SKALGIQRTTVRAI IHKWRRHG

Rana3 51 TVVNLPRSGRPPQITPRAQRRLIQEVTK-DPTTTSKELQASLASVKVSVHA
Rana4 51 TVVNLPRSGRPPQITPRAQRRLIQEVTK-DPTTTSKELQASLASVKVSVHA
Rana10 51 TVVNLPRSGRPPKITPRAQRRLIQEVTK-DPTTTSKELQASLASVKVSVHA
Rana7 50 TVVNLPRSGPPKITPRAQRRLIQEVTKRDPTTTSKELQASLASVKVSVHA
Rana9 51 TVVNLPRSGRPPKITPRAQRRLIQEVTK-DPTTTSKELQASLASVKVSVHA
Rana6 51 TVVNLPRSGRPPKITPRVQRRLIQEVTK-DPTTTSKELQASLASVKVSVHA
Rana2 51 TVVNLPRSGRPPKITPRAQRRLIQEVTK-DPTTTSKELQASLASVKVSVHA
Rana1 51 TVVNLPRS---PKITPRAQRRLIQEVTK-DPTTTSKELQASLASVKVSVHA
Rana8 51 TVVNLPRSGRRXXITPRAQRRLIQEVTK-DPTTNVKELQASLGSVKVSVHA
Rana5 51 TVXNLPXSGRXAXITPRXXXRLIQEVTK-DPTTTSKELQASLASVKVSVHA
FP 51 TVVNLPRSGRPPKITPRAQRRLIQEVTK-DPTTTSKELQASLASVKVSVHA

Rana3 101 STIRKRLGKNGLHGRVPRRKPLL SKKNIKARLNFSTTHLDDPQDFWDNII
Rana4 101 STIRKRLGKNGLHGRVPRRKPLL SKKNIKARLNFSTTHLDDPQDFWDNII
Rana10 101 STIRKRLGKNGLHGRVPRRKPLL SKKNIKARLNFSTTHLDDPQDFWDNII
Rana7 100 STIRKRLGKNGLHGRVPRRKPLL SKKNIKARLNFSTTHLDDPQDFWDNII
Rana9 101 STIRKRLGKNGLHGRVPRRKPLL SKKNIKARLNFSTTHLDDPQDFWENII
Rana6 101 STIRKRLGKNGLHGRVPRRKPLL SKKNIKARLNFSTTHLDDPQDFWDNII
Rana2 101 STIRKRLGKNGLHGRVPRRKPLL SKKNIKARLNFSTTHLDDPQNFWDNII
Rana1 101 STIRKRLDKNGLHGRVPRRKPLL SKKNIKARLNFSTTHLDDPQDFWDNII
Rana8 101 STIRKRLGKNGLHGRVPRRKPLL SKKNIKARLNFSTTHLDDPQDFWDNII
Rana5 101 STIRKRLXKNGLHGRVPRRKPLL SKKNIKARLNFSTTHLDDPQNFWDNII
FP 101 STIRKRLGKNGLHGRVPRRKPLL SKKNIKARLNFSTTHLDDPQDFWDNII

Rana3 151 WTDETKVELFGRCVSKYI WRRRNTALHKKNI IPTVKYGGGSVMVWGCFAA
Rana4 151 WTDETKVELFGRCVSKYI WRRRNTALHKKNI IPTVKYGGGSVMVWGCFAA
Rana10 151 WSDETKVELFGRCVSKYI WRRRNTAFHKKNI IPTVKYGGGSVMVWGCFAA
Rana7 150 WTDETKVELFGRCVSKYI WRRRNTAFHKKNI IPTVKYGGGSVMVWGCFAA
Rana9 151 WTDETKVELFGRCVSKYI WRRRNTAFHKKNI IPTVKYGGGSVMVWGCFAA
Rana6 151 WTDETKVELFGRCVSKYI WRRRNTAFHKKNI IPTVKYGGGSVMVWGCFAA
Rana2 151 WTDETKVELFGRCVSKYI WRRRNTAFHKKNI IPTVKYGGGSVMVWGCFAA
Rana1 151 WTDETKVELFGRCVSKYI WRRRNTAFHKKNI IPTVKYGGGSVMVWGCFAA
Rana8 151 WTDETKVELFGRCVSKYI WRRRNTAFHKKNI IPTVKYGGGSVMVWGCFAA
Rana5 151 WTDETKVELFGRCVSKYI WRRRNTAFHKKNI IPTVKYGGGSVMVWGCFAA
FP 151 WTDETKVELFGRCVSKYI WRRRNTAFHKKNI IPTVKYGGGSVMVWGCFAA

Rana3	201	SGPGRLAVIKGTMNSAVYQEILKENVRPSVRVLKLRWVWLQQXNDPKHX
Rana4	201	SGPGRLAVIKGTMNSAVYQEILKENVRPSVRVLKLRWVWLQQDNDPKHT
Rana10	201	SGPGRLAVIKGTMNSAVYQEILKENVRPSVRVLKLRWVWLQQDNDPKHT
Rana7	200	SGPGRLAVIKGTMNSAVYQEILKENVRPSVRVLKLRWVWLQQNNDPKHT
Rana9	201	SGPGRLAVIKGTMNFAVYQEILKENVRPSVRVLKLRWVWLQQDNDPKHT
Rana6	201	SGPGRLAVIKGTMNSAVYQEILKENVRPSVIVLKLRWVWLQQDNDPKHT
Rana2	201	SGPGRLAVIKGTMNSAXYQEILKENVRPSFRVLKLRWVWLQQDNDPKHT
Rana1	201	SGPGRLAVIKGTMNSAVYQEILKENVRPSVRVLKLRWVWLQQDNDPKHT
Rana8	201	SGPGRLAVIKGTMNSAVYQEILKENVRPSVIVLKLRWVWLQDQKQDNDPKHT
Rana5	201	SGPGRLAVIKGTMNSAVYQEILKENVRPSFRVLKXKRTWVWLQQVNDPXHT
FP	201	SGPGRLAVIKGTMNSAVYQEILKENVRPSVRVLKLRWVWLQQDNDPKHT

Rana3	251	SKSTTEWLKKNMKTLEWPSQSPDLNPIEMLWYDLKKAHVHARKPSNVTEL
Rana4	251	SKSTTEWLKKNMKTLEWPSQSPDLNPIEMLWYDLKKAHVHARKPSNVTEL
Rana10	251	SKSTTEWLKKNMKTLEWPSQSPDLNPIEMLWYDLKKAHVHARKPSNVTEL
Rana7	250	RKSTTEWLKKNMKTLEWPSQSPDLNPIEMLWYDLKKAHVHARKPSNVTEL
Rana9	251	SKSTTEWLKKNMKTLEWPSQSPDLNPIEMLWYDLKKAHVHARKPSNVTEL
Rana6	251	SKSTTEWLKKNMKTLEWPSQSPDLNPIEMFWYDLKKAHVHARKPSNVTEL
Rana2	251	SKSTTEWLKKNMKTLEWPSQSPDLNPIEMLWYDLKKAHVHARKPSNVTEL
Rana1	251	SKSTTEWLKKNMKTLEWPSQSPDLNPIEMLWYDLKKAHVHARKPSNVTEL
Rana8	251	SKSTTEWLKKNMKTLEWPSQSPDLNPIEMLWYDLKKAHVHARKPSNVTEL
Rana5	251	SKSTTEWLKXNKMKTLEWPSQSPDLNPIEMLWYDLKKAHVHARKPSNVTEL
FP	251	SKSTTEWLKKNMKTLEWPSQSPDLNPIEMLWYDLKKAHVHARKPSNVTEL

Rana3	301	GQFCKDEWAKIPPGCCCKSLIARYRKRLVAVVAAKGGPTSY
Rana4	301	GQFCKDEWAKIPPGCCCKSLIARYRKRLVAVVAAKGGPTSY
Rana10	301	GQFCKDEWAKIPPGCCCKSLIARYRKRLVAVVAAKGGPTSY
Rana7	300	GQFCKDEWAKIPPGRCKSLIARYRKRLVAVVAAKGGPTSY
Rana9	301	GQFCKDEWAKIPPGRCKSLIARYRKRLVAVVAAKGGPTSY
Rana6	301	GQFCKDEWAKIPPGRCKSLIARYRKRLVAVVAAKGGPTSY
Rana2	301	GQFCKDE-AKIPPGRCKSLIARYRKRLVAVVAAKGGPTSY
Rana1	301	GQFCKDEWAKIPPGRCKSLIARYRKRLVAVVIAKGGPTSY
Rana8	301	GQFCKDEWAKIPPGRCKSLIGTSL-----
Rana5	301	GQFCKDE-AKIPPGRCKXSLIARYRKRLVAVVAAKGGPTSY
FP	301	GQFCKDEWAKIPPGRCKSLIARYRKRLVAVVAAKGGPTSY

B

SB 1 MGKSKETISQDLRKKIVDLHKSGSSLGAI SKRLKVP RSSVQTI VRKYKHHGTTQPSYRSGR
FP 1 MPRPKETIQEQLRKKVIEIYQSGKGYKAISKALGIQRTTVRAIIHKWRRHGTVVNLPRSGR

SB 61 RRVLSPRDERTLV RKVQINPRTIAKDLVKMLEETGTKVSI STVKRVLYRHNLKGRSARKK
FP 61 PPKITPRAQRRLIQEVTKDPTTTSKELQASLASVKVSVHASTIRKRLGKNGLHGRVPRRK

SB 121 PLLQNRHKKARLRFATAHGD KDRTFWRNVLWSDETKIE LFGHNDHRYVWRKKGEACKPKN
FP 121 PLLSKKNIKARLNFSTTHLDDPQDFW DNI LWIDETKVELFGRCVSKYIWRRRNTAFHKKN

SB 181 TIPTVKHGGGSIMLWGCFAAGGTGALHKIDGIMRKENYVDILKQHLKTSVRK LKLGRKWV
FP 181 IIP TVKYGGGSVMVWGCFAASGPGRLAVIKGTMNSAVYQEILKENVRP SVRVLK LKRTWV

SB 241 FQMDNDPKHTSKV VAKWLKDNKVKVLEWPSQSPDLNPIENLWAE LKKRVRARRPTNLTQL
FP 241 LQDNDPKHTSKSTTEWLKKNKMKTLEWPSQSPDLNPIEMLWYDLKKA V HARKPSNVTEL

SB 301 HOLCQEEWAKIHPTYCGKLV EGYPKRLTQVKQFKGNATKY
FP 301 GQFCKDEWAKIPPGRCKSLIARYRKRLVAVVAAKGGPTSY