

# Alignment of pbp1A sequence

pbp1a_32098	MVNLLKTTTIKKALLITANILLAGAI IACLAGAALVVYYIQSAPELTEESLTATVSSKIY	60
pbp1a_33329	MVNLLKTTTIKKALLITANILLAGAI IACLAGAALVVYYIQSAPELTEESLTATVSSKIY	60
pbp1a_22715	MVNLLKTTTIKKALLITANILLAGAI IACLAGAALVVYYIQSAPELTEESLTATVSSKIY	60
pbp1a_37647	MVNLLKTTTIKKALLITANILLAGAI IACLAGAALVVYYIQSAPELTEESLTATVSSKIY	60
pbp1a_40085	MVNLLKTTTIKKALLITANILLAGAI IACLAGAALVVYYIQSAPELTEESLTATVSSKIY	60
pbp1a_40484	MVNLLKTTTIKKALLITANILLAGAI IACLAGAALVVYYIQSAPELTEESLTATVSSKIY	60
pbp1a_40747	MVNLLKTTTIKKALLITANILLAGAI IACLAGAALVVYYIQSAPELTEESLTATVSSKIY	60
pbp1a_41126	MVNLLKTTTIKKALLITANILLAGAI IACLAGAALVVYYIQSAPELTEESLTATVSSKIY	60
pbp1a_30190	MVNLLKTTTIKKALLITANILLAGAI IACLAGAALVVYYIQSAPELTEESLTATVSSKIY	60
pbp1a_32494	MVNLLKTTTIKKALLITANILLAGAI IACLAGAALVVYYIQSAPELTEESLTATVSSKIY	60
pbp1a_P1/7	MVNLLKTTTIKKALLITANILLAGAI IACLAGAALVVYYIQSAPELTEESLTATVSSKIY	60
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pbp1a_32098	DKNGNLIADLGAEKRSSAKTEEIP TDLVNAIVAIEDQRFFNHRGVDVIRIAGSLINNLSG	120
pbp1a_33329	DKNGNLIADLGAEKRSSAKTEEIP TDLVNAIVAIEDQRFFNHRGVDVIRIAGSLINNLSG	120
pbp1a_22715	DKNGNLIADLGAEKRSSAKTEEIP TDLVNAIVAIEDQRFFNHRGVDVIRIAGSLINNLSG	120
pbp1a_37647	DKNGNLIADLGAEKRSSAKTEEIP TDLVNAIVAIEDQRFFNHRGVDVIRIAGSLINNLSG	120
pbp1a_40085	DKNGNLIADLGAEKRSSAKTEEIP TDLVNAIVAIEDQRFFNHRGVDVIRIAGSLINNLSG	120
pbp1a_40484	DKNGNLIADLGAEKRSSAKTEEIP TDLVNAIVAIEDQRFFNHRGVDVIRIAGSLINNLSG	120
pbp1a_40747	DKNGNLIADLGAEKRSSAKTEEIP TDLVNAIVAIEDQRFFNHRGVDVIRIAGSLINNLSG	120
pbp1a_41126	DKNGNLIADLGAEKRSSAKTEEIP TDLVNAIVAIEDQRFFNHRGVDVIRIAGSLINNLSG	120
pbp1a_30190	DKNGNLIADLGAEKRSSAKTEEIP TDLVNAIVAIEDQRFFNHRGVDVIRIAGSLINNLSG	120
pbp1a_32494	DKNGNLIADLGAEKRSSAKTEEIP TDLVNAIVAIEDQRFFNHRGVDVIRIAGSLINNLSG	120
pbp1a_P1/7	DKNGNLIADLGAEKRSSAKTEEIP TDLVNAIVAIEDQRFFNHRGVDVIRIAGSLINNLSG	120
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pbp1a_32098	GRLQGGSTLDQQFIKLT YFSTSVEDQNLKRKIQEAWLATQLERRNTKQEILTYYINKVYM	180
pbp1a_33329	GRLQGGSTLDQQFIKLT YFSTSVEDQNLKRKIQEAWLATQLERRNTKQEILTYYINKVYM	180
pbp1a_22715	GRLQGGSTLDQQFIKLT YFSTSVEDQNLKRKIQEAWLATQLERRNTKQEILTYYINKVYM	180
pbp1a_37647	GRLQGGSTLDQQFIKLT YFSTSVEDQNLKRKIQEAWLATQLERRNTKQEILTYYINKVYM	180
pbp1a_40085	GRLQGGSTLDQQFIKLT YFSTSVEDQNLKRKIQEAWLATQLERRNTKQEILTYYINKVYM	180
pbp1a_40484	GRLQGGSTLDQQFIKLT YFSTSVEDQNLKRKIQEAWLATQLERRNTKQEILTYYINKVYM	180
pbp1a_40747	GRLQGGSTLDQQFIKLT YFSTSVEDQNLKRKIQEAWLATQLERRNTKQEILTYYINKVYM	180
pbp1a_41126	GRLQGGSTLDQQFIKLT YFSTSVEDQNLKRKIQEAWLATQLERRNTKQEILTYYINKVYM	180
pbp1a_30190	GRLQGGSTLDQQFIKLT YFSTSVEDQNLKRKIQEAWLATQLERRNTKQEILTYYINKVYM	180
pbp1a_32494	GRLQGGSTLDQQFIKLT YFSTSVEDQNLKRKIQEAWLATQLERRNTKQEILTYYINKVYM	180
pbp1a_P1/7	GRLQGGSTLDQQFIKLT YFSTSVEDQNLKRKIQEAWLATQLERRNTKQEILTYYINKVYM	180
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pbp1a_32098	SNGNYGMKTAALAFY GKELKDLTLPQLALLAGMPQAPNQYDPYTNPEDAKVRRDLVLAEM	240
pbp1a_33329	SNGNYGMKTAALAFY GKELKDLTLPQLALLAGMPQAPNQYDPYTNPEDAKVRRDLVLAEM	240
pbp1a_22715	SNGNYGMKTAALAFY GKELKDLTLPQLALLAGMPQAPNQYDPYTNPEDAKARRDLVLAEM	240
pbp1a_37647	SNGNYGMKTAALAFY GKELKDLTLPQLALLAGMPQAPNQYDPYTNPEDAKARRDLVLAEM	240
pbp1a_40085	SNGNYGMKTAALAFY GKELKDLTLPQLALLAGMPQAPNQYDPYTNPEDAKARRDLVLAEM	240
pbp1a_40484	SNGNYGMKTAALAFY GKELKDLTLPQLALLAGMPQAPNQYDPYTNPEDAKARRDLVLAEM	240
pbp1a_40747	SNGNYGMKTAALAFY GKELKDLTLPQLALLAGMPQAPNQYDPYTNPEDAKARRDLVLAEM	240
pbp1a_41126	SNGNYGMKTAALAFY GKELKDLTLPQLALLAGMPQAPNQYDPYTNPEDAKARRDLVLAEM	240
pbp1a_30190	SNGNYGMKTAALAFY GKELKDLTLPQLALLAGMPQAPNQYDPYTNPEDAKARRDLVLAEM	240
pbp1a_32494	SNGNYGMKTAALAFY GKELKDLTLPQLALLAGMPQAPNQYDPYTNPEDAKARRDLVLAEM	240
pbp1a_P1/7	SNGNYGMKTAALAFY GKELKDLTLPQLALLAGMPQAPNQYDPYTNPEDAKARRDLVLAEM	240
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pbp1a_32098	LEEKYIDNTQYEQAVLT PVT DGLQPLSNAAAYPAYMDNYLKQVVVEEVEEKTGYNLLTTGM	300
pbp1a_33329	LEEKYIDNTQYEQAVLT PVT DGLQPLSNAAAYPAYMDNYLKQVVVEEVEEKTGYNLLTTGM	300
pbp1a_22715	LEEKYIDNTQYEQAVLT PVT DGLQPLSNAAAYPAYMDNYLKQVVVEEVEEKTGYNLLTTGM	300
pbp1a_37647	LEEKYIDNTQYEQAVLT PVT DGLQPLSNAAAYPAYMDNYLKQVVVEEVEEKTGYNLLTTGM	300
pbp1a_40085	LEEKYIDNTQYEQAVLT PVT DGLQPLSNAAAYPAYMDNYLKQVVVEEVEEKTGYNLLTTGM	300
pbp1a_40484	LEEKYIDNTQYEQAVLT PVT DGLQPLSNAAAYPAYMDNYLKQVVVEEVEEKTGYNLLTTGM	300
pbp1a_40747	LEEKYIDNTQYEQAVLT PVT DGLQPLSNAAAYPAYMDNYLKQVVVEEVEEKTGYNLLTTGM	300
pbp1a_41126	LEEKYIDNTQYEQAVLT PVT DGLQPLSNAAAYPAYMDNYLKQVVVEEVEEKTGYNLLTTGM	300
pbp1a_30190	LEEKYIDNTQYEQAVLT PVT DGLQPLSNAAAYPAYMDNYLKQVVVEEVEEKTGYNLLTTGM	300
pbp1a_32494	LEEKYIDNTQYEQAVLT PVT DGLQPLSNAAAYPAYMDNYLKQVVVEEVEEKTGYNLLTTGM	300
pbp1a_P1/7	LEEKYIDNTQYEQAVLT PVT DGLQPLSNAAAYPAYMDNYLKQVVVEEVEEKTGYNLLTTGM	300
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pbp1a_32098	DVYTNVDPAAQQQLWNIYNTDMYVSYPPDLLQVASTVVDVSNQKVVAQLGGRKQETNVSF	360
pbp1a_33329	DVYTNVDPAAQQQLWNIYNTDMYVSYPPDLLQVASTVVDVSNQKVVAQLGGRKQETNVSF	360
pbp1a_22715	DVYTNVDPAAQQQLWNIYNTDMYVSYPPDLLQVASTVVDVSNQKVVAQLGGRKQETNVSF	360
pbp1a_37647	DVYTNVDPAAQQQLWNIYNTDMYVSYPPDLLQVASTVVDVSNQKVVAQLGGRKQETNVSF	360
pbp1a_40085	DVYTNVDPAAQQQLWNIYNTDMYVSYPPDLLQVASTVVDVSNQKVVAQLGGRKQETNVSF	360
pbp1a_40484	DVYTNVDPAAQQQLWNIYNTDMYVSYPPDLLQVASTVVDVSNQKVVAQLGGRKQETNVSF	360
pbp1a_40747	DVYTNVDPAAQQQLWNIYNTDMYVSYPPDLLQVASTVVDVSNQKVVAQLGGRKQETNVSF	360
pbp1a_41126	DVYTNVDPAAQQQLWNIYNTDMYVSYPPDLLQVASTVVDVSNQKVVAQLGGRKQETNVSF	360
pbp1a_30190	DVYTNVDPAAQQQLWNIYNTDMYVSYPPDLLQVASTVVDVSNQKVVAQLGGRKQETNVSF	360
pbp1a_32494	DVYTNVDPAAQQQLWNIYNTDMYVSYPPDLLQVASTVVDVSNQKVVAQLGGRKQETNVSF	360
pbp1a_P1/7	DVYTNVDPAAQQQLWNIYNTDMYVSYPPDLLQVASTVVDVSNQKVVAQLGGRKQETNVSF	360
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pbp1a_32098	GNISVKTAIQYSRNVTAVKALEATGLENALKFLNSVGIDYDPDIYYSNAISSNTSDTGSQY	480
pbp1a_33329	GNISVKTAIQYSRNVTAVKALEATGLENALKFLNSVGIDYDPDIYYSNAISSNTSDTGSQY	480
pbp1a_22715	GNISVKTAIQYSRNVTAVKALEATGLANALKFLNSVGINYPDIHYSNAISSNTSDTSSKY	480
pbp1a_37647	GNISVKTAIQYSRNVTAVKALEATGLANALKFLNSVGINYPDIHYSNAISSNTSDTSSKY	480
pbp1a_40085	GNISVKTAIQYSRNVTAVKALEATGLANALKFLNSVGINYPDIHYSNAISSNTSDTSSKY	480
pbp1a_40484	GNISVKTAIQYSRNVTAVKALEATGLANALKFLNSVGINYPDIHYSNAISSNTSDTSSKY	480
pbp1a_40747	GNISVKTAIQYSRNVTAVKALEATGLANALKFLNSVGINYPDIHYSNAISSNTSDTSSKY	480
pbp1a_41126	GNISVKTAIQYSRNVTAVKALEATGLANALKFLNSVGINYPDIHYSNAISSNTSDTSSKY	480
pbp1a_30190	GNISVKTAIQYSRNVTAVKALEATGLENALKFLNSVGINYPDIHYSNAISSNTSDTSSKY	480
pbp1a_32494	GNISVKTAIQYSRNVTAVKALEATGLENALKFLNSVGINYPDIHYSNAISSNTSDTSSKY	480
pbp1a_P1/7	GNISVKTAIQYSRNVTAVKALEATGLENALKFLNSVGINYPDIHYSNAISSNTSDTSSKY	480
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pbp1a_32098	AVMSYGYGLDASVSGVPMAGKTGTSNYTDSETDTILAAIPEANYSYMVVPDENFVGYS	600
pbp1a_33329	AVMSYGYGLDASVSGVPMAGKTGTSNYTDSETDTILAAIPEANYSYMVVPDENFVGYS	600
pbp1a_22715	AVMSYGYGLNASVSGVPMAGKTGTSNYTDSETDTILASAIPEANYSYMVVPDENFVGYS	600
pbp1a_37647	AVMSYGYGLNASVSGVPMAGKTGTSNYTDSETDTILASAIPEANYSYMVVPDENFVGYS	600
pbp1a_40085	AVMSYGYGLNASVSGVPMAGKTGTSNYTDSETDTILASAIPEANYSYMVVPDENFVGYS	600
pbp1a_40484	AVMSYGYGLNASVSGVPMAGKTGTSNYTDSETDTILASAIPEANYSYMVVPDENFVGYS	600
pbp1a_40747	AVMSYGYGLNASVSGVPMAGKTGTSNYTDSETDTILASAIPEANYSYMVVPDENFVGYS	600
pbp1a_41126	AVMSYGYGLNASVSGVPMAGKTGTSNYTDSETDTILASAIPEANYSYMVVPDENFVGYS	600
pbp1a_30190	AVMSYGYGLNASVSGVPMAGKTGTSNYTDSETDTILASAIPEANYSYMVVPDENFVGYS	600
pbp1a_32494	AVMSYGYGLNASVSGVPMAGKTGTSNYTDSETDTILASAIPEANYSYMVVPDENFVGYS	600
pbp1a_P1/7	AVMSYGYGLNASVSGVPMAGKTGTSNYTDSETDTILASAIPEANYSYMVVPDENFVGYS	600

pbp1a_32098	YAMAVWTGYTNRMTPILDNSMRIATDVYHNMLFMHSDYTATDWEMPSGLVRYGSNYLLR	660
pbp1a_33329	YAMAVWTGYTNRMTPILDNSMRIATDVYHNMLFMHSDYTATDWEMPSGLVRYGSNYLLR	660
pbp1a_22715	YAMAVWTGYTNRMTPILDNSMRIATDVYHNMLFMHSDYTATDWEMPSGLVRYGSNYLLR	660
pbp1a_37647	YAMAVWTGYTNRMTPILDNSMRIATDVYHNMLFMHSDYTATDWEMPSGLVRYGSNYLLR	660
pbp1a_40085	YAMAVWTGYTNRMTPILDNSMRIATDVYHNMLFMHSDYTATDWEMPSGLVRYGSNYLLR	660
pbp1a_40484	YAMAVWTGYTNRMTPILDNSMRIATDVYHNMLFMHSDYTATDWEMPSGLVRYGSNYLLR	660
pbp1a_40747	YAMAVWTGYTNRMTPILDNSMRIATDVYHNMLFMHSDYTATDWEMPSGLVRYGSNYLLR	660
pbp1a_41126	YAMAVWTGYTNRMTPILDNSMRIATDVYHNMLFMHSDYTATDWEMPSGLVRYGSNYLLR	660
pbp1a_30190	YAMAVWTGYTNRMTPILDNSMRIATDVYHNMLFMHSDYTATDWEMPSGLVRYGSNYLLR	660
pbp1a_32494	YAMAVWTGYTNRMTPILDNSMRIATDVYHNMLFMHSDYTATDWEMPSGLVRYGSNYLLR	660
pbp1a_P1/7	YAMAVWTGYTNRMTPILDNSMRIATDVYHNMLFMHSDYTATDWEMPSGLVRYGSNYLLR	660
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pbp1a_32098	GSRSLSNAYNTYTSYSTSSSSSTETSETAEATTTSSSETSSGTSTETATSPTATSSSTETAT	720
pbp1a_33329	GSRSLSNAYNTYTSYSTSSSSSTETSETAEATTTSSSETSSGTSTETATSPTATSSSTETAT	720
pbp1a_22715	GSRSLSNAYNTYTSBSTSSSSSTETSETAEATTTSSSETSSGTSTETAT-----SSTETAT	715
pbp1a_37647	GSRSLSNAYNTYTSBSTSSSSSTETSETAEATTTSSSETSSGTSTETAT-----SSTETAT	715
pbp1a_40085	GSRSLSNAYNTYTSBSTSSSSSTETSETAEATTTSSSETSSGTSTETAT-----SSTETAT	715
pbp1a_40484	GSRSLSNAYNTYTSBSTSSSSSTETSETAEATTTSSSETSSGTSTETAT-----SSTETAT	715
pbp1a_40747	GSRSLSNAYNTYTSBSTSSSSSTETSETAEATTTSSSETSSGTSTETAT-----SSTETAT	715
pbp1a_41126	GSRSLSNAYNTYTSBSTSSSSSTETSETAEATTTSSSETSSGTSTETAT-----SSTETAT	715
pbp1a_30190	GSRSLSNAYNTYTSBSTSSSSSTETSETTEATTTSSSETSSGTATETAT-----SSTETAT	715
pbp1a_32494	GSRSLSNAYNTYTSBSTSSSSSTETSETTEATTTSSSETSSGTATETAT-----SSTETAT	715
pbp1a_P1/7	GSRSLSNAYNTYTSBSTSSSSSTETSETTEATTTSSSETSSGTATETAT-----SSTETAT	715
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pbp1a_32098	TGNNPATGQTDGQ	733
pbp1a_33329	TGNNPATGQTDGQ	733
pbp1a_22715	TGNNPATGQTDGQ	728
pbp1a_37647	TGNNPATGQTDGQ	728
pbp1a_40085	TGNNPATGQTDGQ	728
pbp1a_40484	TGNNPATGQTDGQ	728
pbp1a_40747	TGNNPATGQTDGQ	728
pbp1a_41126	TGNNPATGQTDGQ	728
pbp1a_30190	TGNNPATGQTDGQ	728
pbp1a_32494	TGNNPATGQTDGQ	728
pbp1a_P1/7	TGNNPATGQTDGQ	728
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