

gi | 29725609 | ref | NP_005219.2 | **CF**SI**S**GD**L**HL**IL**P**V**AF**R**GD**S**F**TH**PP**L**DP**Q**EL**D**IL**K**IV**KE**IG**F**LL**I**Q**A**W**EN**RT**DL**HAF**EN**LE**IR**GT**K**OH**G**OF**S**LAV**V**SL**NI**TS**L**GL**R**SL**KE**IS**D**GD**V**II**S**GN**K**NL**C**Y**AN**T**IN**W**K**LF**G**T**S**G**O**K**T**II**S**NR**G**ENS**CK**AT**Q**V**CH**AL**S** 511
gi | 114613403 | ref | XP_001156495.1 | **CF**SI**S**GD**L**HL**IL**P**V**AF**R**GD**S**F**TH**PP**L**DP**Q**EL**D**IL**K**IV**KE**IG**F**LL**I**Q**A**W**EN**RT**DL**HAF**EN**LE**IR**GT**K**OH**G**OF**S**LAV**V**SL**NI**TS**L**GL**R**SL**KE**IS**D**GD**V**II**S**GN**K**NL**C**Y**AN**T**IN**W**K**LF**G**T**S**G**O**K**T**II**S**NR**G**ENS**CK**AT**Q**V**CH**AL**S** 511
gi | 46560582 | ref | NP_997538.1 | **CT**AI**S**GD**L**HL**IL**P**V**AF**R**GD**S**F**TR**PP**L**DP**R**EL**E**IL**K**IV**KE**IG**F**LL**I**Q**A**W**EN**WT**DL**HAF**EN**LE**IR**GT**K**OH**G**OF**S**LAV**V**GL**NI**TS**L**GL**R**SL**KE**IS**D**GD**V**II**S**GN**R**NL**C**Y**AN**T**IN**W**K**LF**G**T**S**G**O**K**T**II**M**NR**AE**K**D**CA**V**N**H**V**C**N**PL**CS 511
gi | 25742617 | ref | NP_113695.1 | **CT**AI**S**GD**L**HL**IL**P**V**AF**R**GD**S**F**TR**PP**L**DP**R**EL**E**IL**K**IV**KE**IG**F**LL**I**Q**A**W**EN**WT**DL**HAF**EN**LE**IR**GT**K**OH**G**OF**S**LAV**V**GL**NI**TS**L**GL**R**SL**KE**IS**D**GD**V**II**S**GN**R**NL**C**Y**AN**T**IN**W**K**LF**G**T**S**G**O**K**T**II**M**NR**AE**K**D**CA**T**N**H**V**C**N**PL**CS 511
gi | 73981874 | ref | XP_533073.2 | **CF**SI**S**GD**L**HL**IL**P**V**AF**R**GD**S**F**TH**PP**L**DP**Q**EL**D**IL**K**IV**KE**IG**F**LL**I**Q**A**W**EN**RT**DL**HAF**EN**LE**IR**GT**K**OH**G**OF**S**LAV**V**GL**NI**TS**L**GL**R**SL**KE**IS**D**GD**V**II**S**GN**R**KL**C**Y**AN**T**IN**W**K**LF**G**T**S**S**O**K**T**II**IN**N**K**DE**K**ACK**A**IG**H**V**CH**PL**CS** 899
gi | 119920730 | ref | XP_592211.3 | **CF**SI**S**GD**L**HL**IL**P**V**AF**R**GD**S**F**TR**PP**L**DP**R**EL**E**IL**K**IV**KE**IG**F**LL**I**Q**A**W**EN**RT**DL**HAF**EN**LE**IR**GT**K**OH**G**OF**S**LAV**V**GL**DI**TS**L**GL**R**SL**KE**IS**D**GD**V**II**S**GN**R**NL**C**Y**AN**T**IR**W**K**LF**G**T**S**T**O**K**T**II**L**NR**S**E**K**Q**CK**A**A**GH**I**CH**PL**CS 488
gi | 35903183 | ref | NP_919405.1 | **CK**IS**GN**V**A**IL**ST**TF**R**GD**P**HT**IN**S**GL**DP**AK**L**S**VL**S**IV**KE**IG**V**LM**I**Q**LP**ES**MQ**SL**AF**EN**LE**VR**IG**RT**K**T**G**GY**S**FA**V**T**K**TA**I**TL**GM**RS**LR**E**I**S**D**GD**V**SV**K**N**K**L**C**Y**SS**PE**H**W**K**RL**E**K**Q**SV**K**MI**E**MD**A**AT**Q**AN**Q**NS**IC**N**EM**CI 509



gi | 29725609 | ref | NP_005219.2 | **PE**GC**WG**PE**PR**DC**V**S**CR**N**V**SR**GR**EC**V**DK**N**LL**E**GE**P**RE**F**VE**NS**E**CI**Q**CH**PE**CL**P**O**AM**NI**CT**GR**GP**DN**C**IQ**CA**H**Y**ID**GP**H**CV**K**CP**AG**VM**GE**NN**TL**VW**K**Y**AD**AG**H**V**CH**L**CH**PN**C**TY**G**GT**G**PP 642
gi | 114613403 | ref | XP_001156495.1 | **PE**GC**WG**PE**PR**DC**V**S**CR**N**V**SR**GR**EC**V**DK**N**LL**E**GE**P**RE**F**VE**NS**E**CI**Q**CH**PE**CL**P**O**AM**NI**CT**GR**GP**DN**C**IQ**CA**H**Y**ID**GP**H**CV**K**CP**AG**VM**GE**NN**TL**VW**K**Y**AD**AG**H**V**CH**L**CH**PN**C**TY**G**GT**G**PP**H**SA**M**MP**R**FW**L**SA**T**SP**FL**V**PL**H--**SR**PK 659
gi | 46560582 | ref | NP_997538.1 | **SE**GC**WG**PE**PR**DC**V**S**CR**N**V**SR**GR**EC**V**E**K**NC**IL**E**GE**P**R**E**F**VE**NS**E**CI**Q**CH**PE**CL**P**O**AM**NI**CT**GR**GP**DN**C**IQ**CA**H**Y**ID**GP**H**CV**K**CP**AG**IM**GE**NN**TL**VW**K**Y**AD**AN**N**V**CH**L**CH**AN**C**TY**G**CA**GP** 644
gi | 25742617 | ref | NP_113695.1 | **SE**GC**WG**PE**PT**DC**V**S**CR**N**V**SR**GR**EC**V**DK**N**LL**E**GE**P**RE**F**VE**NS**E**CI**Q**CH**PE**CL**P**O**T**M**NI**CT**GR**GP**DN**C**IQ**CA**H**Y**ID**GP**H**CV**K**CP**SG**IM**GE**NN**TL**VW**K**Y**AD**AN**N**V**CH**L**CH**AN**C**TY**G**CA**GP**G** 643
gi | 73981874 | ref | XP_533073.2 | **SE**GC**WG**PE**PR**DC**V**S**CR**N**V**SR**GR**EC**V**E**K**NC**IL**E**GE**P**R**E**F**VE**NS**E**CI**Q**CH**PE**CL**P**O**AM**NI**CT**GR**GP**DS**C**IK**CA**H**Y**ID**GP**H**CV**K**CP**AG**IM**GE**NN**TL**VW**K**Y**AD**AN**N**V**CH**L**CH**PN**C**TY**G**CE**GP** 1030
gi | 119920730 | ref | XP_592211.3 | **SE**GC**WG**PE**PK**Y**CM**S**CR**N**V**SR**GR**EC**V**E**K**NC**IL**E**GE**P**R**E**F**VE**NS**E**CI**Q**CH**PE**CL**P**O**AM**NI**CT**GR**GP**GN**CV**K**CA**H**Y**ID**GP**H**CV**K**CP**AG**V**AG**EN**TL**W**K**F**AD**AN**H**V**CL**L**CH**PN**C**TY**G**CE**GP** 619
gi | 35903183 | ref | NP_919405.1 | **AD**GC**WG**PE**PT**MC**F**CE**HY**SR**GR**K**CV**AS**C**N**LL**NG**E**P**R**E**Y**EV**IK**T**ME**DP**E**CL**L**M**N**ET**Q**C**NG**GP**DK**TV**C**AN**K**Y**D**GP**H**CV**H**R**CP**Q**GV**PE**K**DT**L**W**K**Y**AD**V**TH**V**CP**CH**EN**CT**Q**GT**GP**D 641



gi | 29725609 | ref | NP_005219.2 | **IP**SI**AT**GM**V**G**AL**LL**LV**AL**G**IG**L**FM**RR**RH**IV**R**K**RT**LR**RL**LQ**ER**EL**VE**PL**TP**GE**AP**NQ**AL**LR**IL**KE**TE**FK**IK**IV**L**G**S**G**AF**G**IV**Y**KL**WI**PE**GE**K**V**IP**V**AI**K**EL**RE**AT**SP**K**AN**KE**IL**DE**AV**MA**S**V**D**N**PH**V**C**RL**L**G**I**CL**TS**V**OL**IT**OL** 792
gi | 114613403 | ref | XP_001156495.1 | **IP**SI**AT**GM**V**G**AL**LL**LV**AL**G**IG**L**FM**RR**RH**IV**R**K**RT**LR**RL**LQ**ER**EL**VE**PL**TP**GE**AP**NQ**AL**LR**IL**KE**TE**FK**IK**IV**L**G**S**G**AF**G**IV**Y**KL**WI**PE**GE**K**V**IP**V**AI**K**EL**RE**AT**SP**K**AN**KE**IL**DE**AV**MA**S**V**D**N**PH**V**C**RL**L**G**I**CL**TS**V**OL**IT**OL** 809
gi | 46560582 | ref | NP_997538.1 | **IP**SI**AT**GI**V**G**LL**L**F**IV**V**AL**G**IG**L**FM**RR**RH**IV**R**K**RT**LR**RL**LQ**ER**EL**VE**PL**TP**GE**AP**NQ**A**H**LR**IL**KE**TE**FK**IK**IV**L**G**S**G**AF**G**IV**Y**K**GL**WI**PE**GE**K**V**IP**V**AI**K**EL**RE**AT**SP**K**AN**KE**IL**DE**AV**MA**S**V**D**N**PH**V**C**RL**L**G**I**CL**TS**V**OL**IT**OL** 794
gi | 25742617 | ref | NP_113695.1 | **IP**SI**AT**GI**V**G**LL**L**F**IV**V**AL**G**IG**L**FM**RR**RL**Q**VR**K**RT**LR**RL**LQ**ER**EL**VE**PL**TP**GE**AP**NQ**A**H**LR**IL**KE**TE**FK**IK**IV**L**G**S**G**AF**G**IV**Y**K**GL**WI**PE**GE**K**V**IP**V**AI**K**EL**RE**AT**SP**K**AN**KE**IL**DE**AV**MA**S**V**D**N**PH**V**C**RL**L**G**I**CL**TS**V**OL**IT**OL** 793
gi | 73981874 | ref | XP_533073.2 | **IP**SI**AT**GI**V**G**LL**LV**V**V**V**AL**G**IG**L**FM**RR**RH**IV**R**K**RT**LR**RL**LQ**ER**EL**VE**PL**TP**GE**AP**NQ**AL**LR**IL**KE**TE**FK**IK**IV**L**G**S**G**AF**G**IV**Y**KL**WI**PE**GE**K**V**IP**V**AI**K**EL**RE**AT**SP**K**AN**KE**IL**DE**AV**MA**S**V**D**N**PH**V**C**RL**L**G**I**CL**TS**V**OL**IT**OL** 1180
gi | 119920730 | ref | XP_592211.3 | **IP**SI**AT**GI**V**G**LL**LV**V**AL**S**V**G**LF**M**RR**RH**IV**R**K**RT**LR**RL**L**Q**ER**EL**VE**PL**TP**GE**AP**NQ**AL**LR**IL**KE**TE**FK**IK**IV**L**G**S**G**AF**G**IV**Y**KL**WI**PE**GE**K**V**IP**V**AI**K**EL**RE**AT**SP**K**AN**KE**IL**DE**AV**MA**S**V**D**N**PH**V**C**RL**L**G**I**CL**TS**V**OL**IT**OL** 769
gi | 35903183 | ref | NP_919405.1 | **LP**MI**AA**GV**V**G**LL**AF**V**IL**AL**GV**AV**LL**RR**HR**IR**R**K**RT**LR**RL**LQ**ER**EL**VE**PL**TP**GE**AP**NQ**AL**LR**IL**KE**TE**FK**IK**IV**L**G**S**G**AF**G**IV**Y**KL**WI**PE**GE**N**V**K**IP**V**AI**K**EL**RE**AT**SP**K**AN**KE**IM**DE**AV**MA**S**V**EH**PH**V**C**RL**L**G**I**CL**TS**V**OL**IT**OL** 791



gi | 29725609 | ref | NP_005219.2 | **MP**FG**CL**LD**YV**RE**HK**DN**IG**S**Q**Y**LL**N**WC**V**Q**IA**K**GM**N**Y**LE**DR**RL**V**HR**DL**AAR**N**V**L**V**K**T**PO**H**V**K**ID**FL**AK**LL**G**A**EE**K**E**Y**H**A**EG**G**K**V**PK**W**MA**LES**IL**H**RY**TH**Q**S**D**V**W**S**Y**G**V**V**W**EL**MT**FG**SK**P**Y**D**GI**P**AS**E**IS**S**IL**E**K**ER**L**P**PP**I**CT**ID** 942
gi | 114613403 | ref | XP_001156495.1 | **MP**FG**CL**LD**YV**RE**HK**DN**IG**S**Q**Y**LL**N**WC**V**Q**IA**K**GM**N**Y**LE**DR**RL**V**HR**DL**AAR**N**V**L**V**K**T**PO**H**V**K**ID**FL**AK**LL**G**A**EE**K**E**Y**H**A**EG**G**K**V**PK**W**MA**LES**IL**H**RY**TH**Q**S**D**V**W**S**Y**G**V**V**W**EL**MT**FG**SK**P**Y**D**GI**P**AS**E**IS**S**IL**E**K**ER**L**P**PP**I**CT**ID** 959
gi | 46560582 | ref | NP_997538.1 | **MP**Y**G**CL**LD**Y**V**RE**HK**DN**IG**S**Q**Y**LL**N**WC**V**Q**IA**K**GM**N**Y**LE**DR**RL**V**HR**DL**AAR**N**V**L**V**K**T**PO**H**V**K**ID**FL**AK**LL**G**A**EE**K**E**Y**H**A**EG**G**K**V**PK**W**MA**LES**IL**H**RY**TH**Q**S**D**V**W**S**Y**G**V**V**W**EL**MT**FG**SK**P**Y**D**GI**P**AS**D**IS**S**IL**E**K**ER**L**P**PP**I**CT**ID** 944
gi | 25742617 | ref | NP_113695.1 | **MP**Y**G**CL**LD**Y**V**RE**HK**DN**IG**S**Q**Y**LL**N**WC**V**Q**IA**K**GM**N**Y**LE**DR**RL**V**HR**DL**AAR**N**V**L**V**K**T**PO**H**V**K**ID**FL**AK**LL**G**A**EE**K**E**Y**H**A**EG**G**K**V**PK**W**MA**LES**IL**H**RY**TH**Q**S**D**V**W**S**Y**G**V**V**W**EL**MT**FG**SK**P**Y**D**GI**P**AS**E**IS**S**IL**E**K**ER**L**P**PP**I**CT**ID** 943
gi | 73981874 | ref | XP_533073.2 | **MP**FG**CL**LD**YV**RE**HK**DN**IG**S**Q**Y**LL**N**WC**V**Q**IA**K**GM**N**Y**LE**DR**RL**V**HR**DL**AAR**N**V**L**V**K**T**PO**H**V**K**ID**FL**AK**LL**G**A**EE**K**E**Y**H**A**EG**G**K**V**PK**W**MA**LES**IL**H**RY**TH**Q**S**D**V**W**S**Y**G**V**V**W**EL**MT**FG**SK**P**Y**D**GI**P**AS**E**IS**S**IL**E**K**ER**L**P**PP**I**CT**ID** 1330
gi | 119920730 | ref | XP_592211.3 | **MP**FG**CL**LD**YV**RE**HK**DN**IG**S**Q**Y**LL**N**WC**V**Q**IA**K**GM**N**Y**LE**DR**RL**V**HR**DL**AAR**N**V**L**V**K**T**PO**H**V**K**ID**FL**AK**LL**G**A**EE**K**E**Y**H**A**EG**G**K**V**PK**W**MA**LES**IL**H**RY**TH**Q**S**D**V**W**S**Y**G**V**V**W**EL**MT**FG**SK**P**Y**D**GI**P**AS**E**IS**S**IL**E**K**ER**L**P**PP**I**CT**ID** 919
gi | 35903183 | ref | NP_919405.1 | **MP**Y**G**CL**LD**Y**V**RE**N**K**DR**IG**S**Q**H**LL**N**WC**V**Q**IA**K**GM**N**Y**LE**ER**HL**V**HR**DL**AAR**N**V**L**V**K**T**PO**H**V**K**I**D**FL**AK**LL**N**A**DE**K**E**Y**H**A**D**G**G**K**V**P**IK**W**MA**LES**IQ**H**RY**TH**Q**S**D**V**W**S**Y**G**V**V**W**EL**MT**FG**K**P**Y**D**GI**P**AS**E**IA**G**V**L**E**K**ER**L**P**PP**I**CT**ID 941



gi | 29725609 | ref | NP_005219.2 | **V**M**I**M**V**K**C**W**M**ID**A**D**S**R**P**K**F**RE**L**IE**F**SK**M**AR**D**P**Q**RY**L**VI**Q**GD**ER**M**HL**PS**PT**DN**S**F**R**AL**M**DE**ED**MD**V**D**V**DA**E**Y**L**IP**Q**GF**FS**PS**TS**RT**PL**LS**LS**LS**AT**SN**S**TV**AC**IN**R**NG**LS**CP**IK**ED**S**FL**Q**RY**SS**DP**T**G**AL**TE**S**ID**D**FL**P**V**PE**Y 1092
gi | 114613403 | ref | XP_001156495.1 | **V**M**I**M**V**K**C**W**M**ID**A**D**S**R**P**K**F**RE**L**IE**F**SK**M**AR**D**P**Q**RY**L**VI**Q**GD**ER**M**HL**PS**PT**DN**S**F**R**AL**M**DE**ED**MD**V**D**V**DA**E**Y**L**IP**Q**GF**FS**PS**TS**RT**PL**LS**LS**LS**AT**SN**S**TV**AC**IN**R**NG**LS**CP**IK**ED**S**FL**Q**RY**SS**DP**T**G**AL**TE**S**ID**D**FL**P**V**PE**Y 1109
gi | 46560582 | ref | NP_997538.1 | **V**M**I**M**V**K**C**W**M**ID**A**D**S**R**P**K**F**RE**L**IE**F**SK**M**AR**D**P**Q**RY**L**VI**Q**GD**ER**M**HL**PS**PT**DN**S**F**R**AL**M**DE**ED**MD**V**D**V**DA**E**Y**L**IP**Q**GF**FS**PS**TS**RT**PL**LS**LS**LS**AT**SN**S**TV**AC**IN**R**NG--**S**CR**V**KE**D**A**F**L**Q**RY**SS**DP**T**G**AV**T**E**D**N**ID**D**A**F**L**P**V**PE**Y 1092
gi | 25742617 | ref | NP_113695.1 | **V**M**I**M**V**K**C**W**M**ID**A**D**S**R**P**K**F**RE**L**IE**F**SK**M**AR**D**P**Q**RY**L**VI**Q**GD**ER**M**HL**PS**PT**DN**S**F**R**AL**M**DE**ED**MD**V**D**V**DA**E**Y**L**IP**Q**GF**FS**PS**TS**RT**PL**LS**LS**LS**AN**SN**S**TV**AC**IN**R**NG--**S**CR**V**KE**D**A**F**L**Q**RY**SS**DP**T**SV**L**T**E**D**N**ID**D**FL**P**V**PE**Y 1091
gi | 73981874 | ref | XP_533073.2 | **V**M**I**M**V**K**C**W**M**ID**A**D**S**R**P**K**F**RE**L**IE**F**SK**M**AR**D**P**Q**RY**L**VI**Q**GD**ER**M**HL**PS**PT**DN**S**F**R**AL**M**DE**ED**MD**V**D**V**DA**E**Y**L**IP**Q**GF**FS**PS**TS**RT**PL**LS**LS**LS**AT**SN**S**TV**AC**IN**R**NG--**T**CL**P**KE**D**E**S**FL**Q**RY**SS**DP**T**G**AL**TE**S**ID**D**FL**P**A**PE**Y 1478
gi | 119920730 | ref | XP_592211.3 | **V**M**I**M**V**K**C**W**M**ID**A**D**S**R**P**K**F**RE**L**IE**F**SK**M**AR**D**P**Q**RY**L**VI**Q**GD**ER**M**HL**PS**PT**DN**S**F**R**AL**M**DE**ED**MD**V**D**V**DA**E**Y**L**IP**Q**GF**FS**PS**TS**RT**PL**LS**LS**LS**SS**TP**V**T**C**VD**R**NG--**S**Y**L**KE**D**S**F**L**Q**RY**SS**DP**T**G**AL**TE**S**ID**D**FL**P**V**PE**Y 1067
gi | 35903183 | ref | NP_919405.1 | **V**M**I**M**V**K**C**W**M**ID**A**E**S**R**P**R**F**RE**L**IA**E**F**T**SK**M**AR**D**P**S**RY**L**VI**Q**GD**DR**M**HL**PS**PS**DS**K**F**V**RS**LM**S**G**-**E**LD**E**AV**D**DA**E**Y**L**V**N**PH**S**F**S**PS**TS**RT**QL**L**H**V**S**L**S**F**GC**N**C**NS**R**NG--**N**F**V**RE**N**SV**L**RY**I**DP**ER**F**O**E**G**---**D**F**Q**P**A**P**G**Y 1083



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gi | 29725609 |ref| NP_005219.2 |  INQSVPKRPAGSVQNPVYHNCPLNPA1510PSRDPHYQDPHS1520TAVGNPEYLN1530TVQPT1540CVNSTFDS1550PAHWAQKGS1560HOISLDN1570PDYQDFF1580PKKAKP1590NGIFKGS1600TAENAEYL1610RVAPQSSEFIGA 1210
gi | 114613403 |ref| XP_001156495.1 |  INQSVPKRPAGSVQNPVYHNCPLNPT1510PSRDPHYQDPHS1520TAVGNPEYLN1530TVQPT1540CVNSTFDS1550PAHWAQKGS1560HOISLDN1570PDYQDFF1580PKKAKP1590NGIFKGS1600TAENAEYL1610RVAPQSSEFIGA 1227
gi | 46560582 |ref| NP_997538.1 |  VNQSVPKRPAGSVQNPVYHNCPL1510LHPAPGRDLHYQNP1520HSNAVGNPEYLN1530TAQPT1540CLSSGFNS1550PALWIKGSHQMSLDN1560PDYQDFF1570PKKAKP1580NGIFKGS1590TAENAEYL1600RVAPPSSEFIGA 1210
gi | 25742617 |ref| NP_113695.1 |  INQSVPKRPAGSVQNPVYHNCPL1510LHPAPGRDLHYQNP1520HSNAVSNPEYLN1530TAQPT1540CLSSGFNS1550PALWIKGSHQMSLDN1560PDYQDFF1570PKKAKP1580NGIFKGS1590TAENAEYL1600RVAPPSSEFIGA 1209
gi | 73981874 |ref| XP_533073.2 |  INQSVPKRPAGSVQNPVYHNCPLNPA1510PARDPHYQNP1520HSNAVSNPEYLN1530THPT1540CVNSVLD1550RPSLWTEANHQI1560ISLDN1570PDYQDFF1580PKKAKS1590NGIFKGS1600PAENADY1610LRVAPPSSEFIGA 1595
gi | 119920730 |ref| XP_592211.3 |  VNQSVPKRPAGSVQNPVYHNCPL1510YPAPGRDPQYON1520SLSN1530AVDNPEYLN1540THPACINGVLDG1550PALWAKGSHQF1560SLDN1570PDYQDAFF1580PKKAKS1590NGIFKGS1600PAENAEYL1610RAAPAGSDFTGA 1185
gi | 35903183 |ref| NP_919405.1 |  N--EYMNQNESMINPVYQ--1510PHGPPRTLLH1520SSPALDETEEYLN1530CFKSPAPASVVEYLN1540SH1550TQLSTK1560PF1570FMDN1580PDYQD1590FCPL1600LEL1610KHTHTNGHLPAAQ1620Q1630EYMGLEVH----- 1191
      .....1510.....1520.....1530.....1540.....1550.....1560.....1570.....1580.....1590.....1600.....1610.....

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