

Patatin-like domain (PLD)

GCGFLG conserved domain GASAG conserved domain

Glossina morsitans morsitans
Drosophila melanogaster
Culex quinquefasciatus
Aedes aegypti
Anopheles gambiae

```
M-----NLSFAGCGFLGIYHVGVAVCFKKYAPHLLE-K-IGGASAGALAACCLLCDLPLGSMSTDFFRVVNEARRHSLGPFSPSENIQTCLLEGLQK
M-----NLSFAGCGFLGIYHVGVAVCFKKYAPHLLE-K-IGGASAGSLAACCLLCDLPLGSMSTDFFRVVNEARRYSLGPFSPSENIQTCLLEGLQK
M-----NLSFAGCGFLGIYHVGVAVCFKKYAPHLLEH-R-ISGASAGSLAACCLLCDMPLGEMTSDFFRVVNEARRSHSLGPFSPSENIQTCLLEGLQK
M-----NLSFAGCGFLGIYHVGVAVAFKKYAPHLLEH-R-ISGASAGALAACCLLCDMPLGEMTSDFFRVVNEARRSHSLGPFSPSENIQTCLLEGLQK
MA--TKM-NLSFAGCGFLGIYHVGVAVCFKKYAPHLLEH-R-ISGASAGALAACCLLCDMPLGEMTSDFFRVVNEARRSHSLGPFSPSENIQTCLLEGLQK
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```
HLPEDAHRVSGRLHISMTRVYDGKNVIVSEFNSRDELLQALLCACFIPGFSGILPPREFGVRYMDGAFSDNLPITLD-ENTITVSPFCGESDICPRDQSS
HLPDDAHRVNGRLHISLTRVYDGKNVILSEFESREEVLLQALLCACFIPGFSGILPPREFGVRYMDGAFSDNLPITLD-ENTITVSPFCGESDICPRDQSS
FLPDDAHERVNGKLHISLTRVYDGKNVIVSQFNSREDLLQALLCACFIPVFSGLLPPREFGVRYMDGAFSDNLPITLD-ENTVTVSPFCGESDICPRDNSS
FLPDDAHERVNGKLHISLTRVYDGKNVIVSQFNSREDLLQALLCACFIPVFSGLLPPREFGVRYMDGAFSDNLPITLD-ENTVTVSPFCGESDICPRDNSS
FLPADAHERVNGKLHISLTRVYDGKNVIVSQFHSREDLLQALLCACFIPVFSGLLPPREFGVRYMDGAFSDNLPITLD-ENTVTVSPFCGESDICPRDNSS
```

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```
QLF--HLNWNANTSIEISRONINREVRILFPPRPEFLSKFCQQGFDDALQFLHRNNLINCRRCVAVQSTFVNSE---TVAQP--Q-DFDPECRECK---
QLF--HLNWNANTSIEISRONINREVRILFPPRPEFLSKFCQQGFDDALQFLHRNNLINCRRCVAVQSTFVNSE---TVAQP--Q-DFDPECRECK---
QMF--HVNWNANTSIELSKQNMNREGRILFPPRPEILSSFCQQGFDDALNFLHRNNLISCTR-CLSVQSTFSLADQPT-OLEDQLE- EYDPECSECKE CN
QMF--HVNWNANTSIELSKENINREGRILFPPKPEILSSFCQQGFDDALNFLHRNNLISCTR-CLAVQSTFVVAEQPSSSLEEKILE- EYDPECSECKE CT
QMF--HVNWNANTSIELSKQNMNREGRILFPPRPEILSSFCQQGFDDALNFLHRNNLISCTR-CLSVQSTFCVSEQPK-OLEEQLE- EYDPECSECKDCN
```

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```
KHRKDALSSN-MP--QTVLDVIQDYIEQANKGLANWLFKHRGKLL--SLPATVPMDFLMATVN-----
KHRKDALSSN-MP--QTVLDVIQDYIEQANKGLANWLFKHRGKLL--SLPATVPMDFLLATIS-----
EHRONALDGS-MP--DTVLTVFQTYIEEANKGLMNWVFRHRGARLLKALSPLATLPADIMVATL-----
QHRKNALVGS-MP--DNVLTVFQTYIEQANKGLINWVFRHRGKLLTALSPLATLPADIVCATL-----
EHRONALDGS-MP--DTVLTVFQTAVDQANKGLMNWVFKHRGARLLKALSPLATLPADIVCATLTNGVGTDIERRQFYKVLGNIICPATSSSTEPMNPS
```

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```
-----KVTTVTPRLTKQMRRLVEELINQFNRRVQVHLFNKFTICDPPHFDTTGLLHSKRLYG
-----KISALTPKLTQARVMVEDLILQLNHAMRIRLLNKFTLYDQPHFDATGLLHSSRLYG
-----SK
-----TK
CQKCLARRLRALSSSGSTVQIRLNDQEARELVPMVRSLETRLKRLMVAIPTIGSGLWSVSKFALKTLNAMLIRVRRGQQ-----
```

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```
PRVSILV-----DECGAPPLEDDVDHYEHVVKVIT
PRVSILV-----DECGATPLEDDVDNFEHVKMIT
-----
--IAAKIQCTMAYTEYTTGQGAQLVSR--RVSTRAAGGSLLDVRVD-NGSDLVAV-----VTHGEHD---RNRG---EGGED-HPDYDTFDNVLQATS
```

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```
HNDALYAYYYTDD-H-TNKVKVTEIFD-----MTENIELATDLKQYEGSIEDHPNPHQ-HHHNA
HNDALYAYYYTDS-N-TNKVKVTEIFDFDE-----ITEHDKLATDLQIYEGSVEDHPNPHQ-HSHNT
-----
HHDSMYAYFYMD--D-NQKVKVTEIFDMDTDDGNPALQTAQERELNQQLEFDNDDWESTATTQPDFLYADSYHSGDEMIDLDELIADPCLYLNSNHQNF
```

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```
VLSEWNGIESDFFIDRQTATSTAHSITDSKISHTVSTVYTTYKIEPDSRTAPSSSEEDNCPFSSEADHYNESDRNEIPRHHYKHDLTIVSTQQDSIV
VVSEWNGVES-----VQVMPTT-----PE-----L-----H-----
-----
HYHQQQFRHHHHHQQLTDGCLQTHHHHVQIEELPAD--DAYLQ-----PEADQQALLSEAAARLLGKA-----
```

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PNELCIDIE-
-----DVAF
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PASAYSIVEM
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Conserved region

Variable region