

A

hypothetical protein, conserved, no recognizable domains
Large insertion in Leishmania CCCH motif (C-X₇-C-X₆-C-X₃-H)

```

LmjF34.0870      FRNAPADLCVAYLMGLCRGRSSPIG...53...AGGVQTCRLLHQDVYDL 374
LinJ34_V3.0920   FRNAPADLCVAYLMGLCRGRSSPIG...51...AGGVQTCRLLHQEVYDL 372
LbrM20_V2.0840   FRNAPADLCLAYLLMGLCRGRNMPIS...52...TVCGQTCHLLHQEVYDL 357
Tc00.1047053506201.10 FRRAPYDLCLGFLMGLCLGD-----EKCRFLHHCHVFSL 272
Tc00.1047053507673.30 FRRAPYDLCLGFLMGLCPGEE-----EKCRFLHHCHVFSL 272
Tb927.4.3540     FRGAPYDLCICFLMGLCNGDE-----ATCNLLHQRVFAL 288
**  *  ***: :***** * . .*:*** *:

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B

protein kinase, CCCH motif is within the kinase domain
CCCH motif only present in *T. brucei* (C-X₉-C-X₅-C-X₃-H)

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Tc00.1047053510089.130 GLGWTSADMWSLGCMIPELLTGDCIFMPQDDLEHIALMQHIIGPFDIPE 519
Tc00.1047053510421.150 GLGWTSADMWSLGCMIPELLTGDCIFMPQDDLEHIALMQHIIGPFDIPE 519
Tb927.3.1610        GLGWTSADMWSLGCMIPELVTGSCMFMPRCDIEHIALLQHIIGPFDVSVE 537
LmjF25.1560         GFGWNTSADIFSLGCMIPELLTGECLFMPNHTMEHIAMMQHVIGTFHDKD 682
*:*:*:***:*****:*.*:***. :*:*:***:***:*.*:*:

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C

ZC3H16, conserved, leucine rich region at the C-terminus
CCCH motif only present in *T. brucei* (C-X₈-C-X₅-C-X₃-H)

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LmjF26.1660      GYYSTGNDMRDRYRGLRCLLHHTRARRICFENVDNSNDAREIVGELCHLM 247
LinJ26_V3.1650   GYYSTGNDMRDRYRGLRCLLHHTRARRICFENVDNSNDAREIVGELCYLM 250
LbrM26_V2.1680   GYYSTGNDMRYRYRGLRCLLHHTRRICFKNVDNCNDAREIVGELGHLM 169
Tb927.7.250 (ZC3H16) NYCSAAPLSGDCYGGLRCIOHIQLRSLTFSSITSLHDAQQVNTLSAAV 164
TcIL3000.7.50    NYCSTASLGNGYGGLRCVLRHVQLRSLTLSGVSSFPDAQRVVEELSVAL 163
Tc00.1047053506413.50 DYSSASLTGDRYGGLRCMLRHMTLQSVTFSGTSDPHDAQRVVEELSQTL 164
Tc00.1047053511237.80 DYSSASLTGDRYGGLRCMLRHMTLQSVTFSGTSDPHDAQRVVEELSQTL 164
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D

predicted domains: Glycin cleavage T-protein (IPR006222); Folate binding (IPR017703)
CCCH motif only present in *L. major* (C-X₉-C-X₆-C-X₃-H)

```

Tb927.8.6480      PGGSLWGCFLHHTGRVMCDAYLYQSTRTPEGQVTIMIDVHCVADTLLEH 86
Tc00.1047053506801.110 PGGSIWGCFLYHTGRLMCDAYLYQPSRVDGGEVCILVDVHRVVDVDTLLHDH 86
LmjF24.1740       PAGSMYCFLYFTGRVLCDAHLYQCKQVHHGGQASILVDVHERSATELLDH 90
*:*:*:***:***:***:***:*.*: .*: .*:*** . * :*

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E

hypothetical protein, conserved, no recognizable domains
CCCH motif only present in *T. brucei* and *T. cruzi* (C-X₇-C-X₄-C-X₃-H)

```

Tc00.1047053506297.130 ICRDYLRGRCLRSDCMMRHVYSKHSQGRISPPRKRDRERRHRSRSRHHRGG 438
Tc00.1047053510101.200 ICRDYLRGRCLRSDCMMRHVYSKHSQGRISPPRKRDRERRHRSRSRHHRGG 438
Tb11.02.4190      ICRDFMRGRCTRSCCVMRHVYSLPPRGRRRARSRSRSRRRSREKHRR-T 447
LmjF11.0930       VKRVKPVEKMVRNCTPSNEQPYKSRHRSRSPRSRRRSRERDHS----SKEC 352
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Other Leishmania species like Lm.