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Section 1

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                    (1) 1         10        20        30        40        50        60        70        83
Ab PB 53-197 aa     (1) GSALSPATPPPSLNLSHQQQQHQQHYALKWNDFQSSILSSFRHLRDEEDFVDVTLACDERSFTAHKVVLSACSPYFRRLLKAN
GAF PC 1-131 aa     (1) ----------------MSLPMNSLYSLTWGDYGTSLVSAIQLLRCHGDLVDCTLAAGGRSFPAHKIVLCAASPFLLDLLKNT
Lolal 1-127 aa      (1) ----------------MMSSDQQFFLKWNDFQTNMVTSFRHLRDEKSFTDVTLACEGQTCKAHKMVLSACSPYFKALLEEN
Bab2 PA 194-313 aa  (1) --------------------EGQQFCLRWNNYQSNLTNVFDELLQSESFVDVTLSCEGHSIKAHKMVLSACSPYFQALFYDN
Psq/BTB V 1-141 aa  (1) ---------------MAAVRGHQYFSLRWNNYQNTMTSVFQQLREDLSFVDVTLSCEHGSLKAHKVVLSACSTYFQKLLLEN
CG8924 PB 1-146 aa  (1) ----------------MSGATQEFCVRWNSHLGSIGAAFPQLLAGQRFVDVTLACEGQQVHCHRLVLAACSTYFEAILAEH
Mod(mdg4) 1-131 aa  (1) -------------------MADDEQFSLCWNNFNTNLSAGFHESLCRGDLVDVSLAAEGQIVKAHRLVLSVCSPFFRKMFTQM
Lola PA 1-120 aa    (1) -------------------MDDDQQFCLRWNNHQSTLISVFDTLLENETLVDCTLAAEGKFLKAHKVVLSACSPYFATLLQEQ
BtbVII PA 1-119 aa  (1) --------------------MSVQQFCLRWNNHQPNFISVCSSLLHNGTLVDVTLAAEGRQLQAHKIVLSACSSYFQALFTTN
Ttk 1-131 aa        (1) ----------------MKMASQRFCLRWNNHQSNLLSVFDQLLHAETFTDVTLAVEGQHLKAHKMVLSACSPYFNTLFVSH
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Section 2

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                    (84) 84      90        100       110       120       130       140       150       164
Ab PB 53-197 aa     (84) P-CEHPIVILRDVRCDDVENLLSFMYNGEVNVSHEQLPDFLKTAHLLQIRGLADVNGGYPYSK------------------
GAF PC 1-131 aa     (67) P-CKHPVVMLAGVNANDLEALLEFVYRGEVSVDHAQLPSLLQAAQCLNIQGLAPQTVTKDDYTTHS---------------
Lolal 1-127 aa      (66) P-SKHPIIILKDVSYIHLQAILEFMYAGEVNVSQEQLPAFLKTADRLKVKGLAETPSSIKREG------------------
Bab2 PA 194-313 aa  (63) PCQHP-IIIMRDVSWSDLKALVEFMYKGEINVCQDQINPLLKVAETLKIRGLAEVSAGR----------------------
Psq/BTB V 1-141 aa  (68) PCKHPTIILPADIIFTDLKTIIDFVYRGEIDVTESELQGLLRTAEQLKIKGLCETAENADDLNDAATATITVSE-------
CG8924 PB 1-146 aa  (66) PCKHPVIILPREIKLWEIQALVDFMYKGEVNVTQAGLGQLLRCAEQLQIRGLYGSEAPINYKKLQQASLEAAKDPAATTAR
Mod(mdg4) 1-131 aa  (65) PSNTHAIVFLNNVSHSALKDLIQFMYCGEVNVKQDALPAFISTAESLQIKGLTDNDPAPQPPQESSP--------------
Lola PA 1-120 aa    (65) Y-DKHPIFILKDVKYQELRAMMDYMYRGEVNISQDQLAALLKAAESLQIKGLSDNRT------------------------
BtbVII PA 1-119 aa  (64) P-CQHPIVILKDVQYDDLKTMVDFMYYGEVNVSQEQLPHILKTAEMLKIKGLAEMPT------------------------
Ttk 1-131 aa        (66) P-EKHPIVILKDVPYSDMKSLLDFMYRGEVSVDQERLTAFLRVAESLRIKGLTEVNDDKPSPAAAAA--------------
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CG8924 BTB alignment with BTB domains of known Ttk-group members (Ab, GAF, Batman (Lolal), Bab2, Psq (BTBV), Mod(mdg4), Lola, BtbVII, Ttk).

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                     
Section 1
(1) 1 10 20 30 40 50 60 70 83
Ab PB 53-197 aa (1) GSALSPATPPPSLNLSHQQQQHQQHYALKWNDFQSSILSSFRHLRDEEDFVDVTLACDERSFTAHKVVLSACSPYFRRLLKAN
GAF PC 1-131 aa (1) ----------MSLPMNSLYSLTWGDYGTSLVSAIQLLRCHGDLVDCTLAAGGRSFPAHKIVLCAASPFLLDLLKNT
Rib 1-141 aa (1) --------MGGPTAPVASSGEVGQTYCLRWNNHQTNLVQILHALHEVGSYVDCSLVVDDEQFQAHRVVLAANSPYFQHILKDV
Mod(mdg4) 1-131 aa (1) ----------MADDEQFSLCWNNFNTNLSAGFHESLCRGDLVDVSLAAEGQIVKAHRLVLSVCSPFFRKMFTQM
Bab2 PA 194-313 aa (1) ----------EGQQFCLRWNNYQSNLTNVFDELLQSESFVDVTLSCEGHSIKAHKMVLSACSPYFQALFYDN
Psq/BTB V 1-141 aa (1) ----------MAAVRGHQYFSLRWNNYQNTMTSVFQQLREDLSFVDVTLSCEHGSLKAHKVVLSACSTYFQKLLLEN
BtbVII PA 1-119 aa (1) ----------MSVQQFCLRWNNHQPNFISVCSSLLHNGTLVDVTLAAEGRQLQAHKIVLSACSSYFQALFTTN
Lola PA 1-120 aa (1) ----------MDDDQQFCLRWNNHQSTLISVFDTLLENETLVDCTLAAEGKFLKAHKVVLSACSPYFATLLQEQ
Ttk 1-131 aa (1) ----------MKMASQRFCLRWNNHQSNLLSVFDQLLHAETFTDVTLAVEGQHLKAHKMVLSACSPYFNTLFVSH
Lolal 1-127 aa (1) ----------MMSSDQQFFLKWNDFQTNMVTSFRHLRDEKSFTDVTLACEGQTCKAHKMVLSACSPYFKALLEEN
Section 2
(84) 84 90 100 110 120 130 140 157
Ab PB 53-197 aa (84) PCEHP-IVILRDVRCDDVENLLSFMYNGEVNVSHEQLPDFLKTAHLLQIRGLADVNGGYPYSK----------
GAF PC 1-131 aa (67) PCKHP-VVMLAGVNANDLEALLEFVYRGEVSVDHAQLPSLLQAAQCLNIQGLAPQTVTKDDYTTHS--------
Rib 1-141 aa (76) PQDHC-SIILPGVKGFEIAALLQYMYTGETTVTKSQEPEILRTAKELQVKGLYDNLMKFNHASVTPT-------
Mod(mdg4) 1-131 aa (65) PSNTHAIVFLNNVSHSALKDLIQFMYCGEVNVKQDALPAFISTAESLQIKGLTDNDPAPQPPQESSP-------
Bab2 PA 194-313 aa (63) PCQHP-IIIMRDVSWSDLKALVEFMYKGEINVCQDQINPLLKVAETLKIRGLAEVSAGR----------
Psq/BTB V 1-141 aa (68) PCKHPTIILPADIIFTDLKTIIDFVYRGEIDVTESELQGLLRTAEQLKIKGLCETAENADDLNDAATATITVSE
BtbVII PA 1-119 aa (64) PCQHP-IVILKDVQYDDLKTMVDFMYYGEVNVSQEQLPHILKTAEMLKIKGLAEMPT----------
Lola PA 1-120 aa (65) YDKHP-IFILKDVKYQELRAMMDYMYRGEVNISQDQLAALLKAAESLQIKGLSDNRT----------
Ttk 1-131 aa (66) PEKHP-IVILKDVPYSDMKSLLDFMYRGEVSVDQERLTAFLRVAESLRIKGLTEVNDDKPSPAAAAA-------
Lolal 1-127 aa (66) PSKHP-IIILKDVSYIHLQAILEFMYAGEVNVSQEQLPAFLKTADRLKVKGLAETPSSIKREG----------
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Rib BTB alignment with BTB domains of Ttk-group members

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                                                                                                                                Section 1
                    (1) 1         10        20        30        40        50        60        70        83
Ab PB 53-197 aa     (1) GSALSPATPPPSLNLSHQQQQHQQHYALKWNDFQSSILSSFRHLRDEEDFVDVTLACDE-RSFTAHKVVLSACSPYFRRLLKA
GAF PC 1-131 aa     (1) ----------------MSLPMNSLYSLTWGDYGTSLVSAIQLLRCHGDLVDCTLAAGG-RSFPAHKIVLCAASPFLLDLLKN
CP190 PA 1-131 aa   (1) ---------------------MGEVKSVKVDNWGVFFLQKLQNFFNKTDYCDLTLQFRDNSQLKVHRLVLSACTDYFNVLEQT
Psq/BTB V 1-141 aa  (1) ---------------MAAVRGHQYFSLRWNNYQNTMTSVFQQLREDLSFVDVTLSCEH-GSLKAHKVVLSACSTYFQKLLLE
Mod(mdg4) 1-131 aa  (1) -------------------MADDEQFSLCWNNFNTNLSAGFHESLCRGDLVDVSLAAEG-QIVKAHRLVLSVCSPFFRKMFTQ
Bab2 PA 194-313 aa  (1) ----------------------EGQQFCLRWNNYQSNLTNVFDELLQSESFVDVTLSCEG-HSIKAHKMVLSACSPYFQALFYD
BtbVII PA 1-119 aa  (1) --------------------MSVQQFCLRWNNHQPNFISVCSSLLHNGTLVDVTLAAEG-RQLQAHKIVLSACSSYFQALFTT
Lola PA 1-120 aa    (1) -------------------MDDDQQFCLRWNNHQSTLISVFDTLLENETLVDCTLAAEG-KFLKAHKVVLSACSPYFATLLQE
Ttk 1-131 aa        (1) ------------------MKMASQRFCLRWNNHQSNLLSVFDQLLHAETFTDVTLAVEG-QHLKAHKMVLSACSPYFNTLFVS
Lolal 1-127 aa      (1) ------------------MMSSDQQFFLKWNDFQTNMVTSFRHLRDEKSFTDVTLACEG-QTCKAHKMVLSACSPYFKALLEE
                                                                                                                                Section 2
                    (84) 84      90        100       110       120       130       140       158
Ab PB 53-197 aa     (83) NPC-EHPIVILRDVRCDDVENLLSFMYNGEVNVSHEQLPDFLKTAHLLQIRGLADVNGGYPYSK-----------
GAF PC 1-131 aa     (66) TPC-KHPVVMLAGVNANDLEALLEFVYRGEVSVDHAQLPSLLQAAQCLNIQGLAPQTVTKDDYTTHS--------
CP190 PA 1-131 aa   (63) CEIVDDALIMPNEFQADVVVPIVNFMYTGTLEFELKMYGKLLRTAKEMNMTVLLKLLEAHRRTMENVNR------
Psq/BTB V 1-141 aa  (67) NPCKHPTIILPADIIFTDLKTIIDFVYRGEIDVTESELQGLLRTAEQLKIKGLCETAENADDLNDAATATITVSE
Mod(mdg4) 1-131 aa  (64) MPSNTHAIVFLNNVSHSALKDLIQFMYCGEVNVKQDALPAFISTAESLQIKGLTDNDPAPQPPQESSP-------
Bab2 PA 194-313 aa  (62) NPC-QHPIIIMRDVSWSDLKALVEFMYKGEINVCQDQINPLLKVAETLKIRGLAEVSAGR---------------
BtbVII PA 1-119 aa  (63) NPC-QHPIVILKDVQYDDLKTMVDFMYYGEVNVSQEQLPHILKTAEMLKIKGLAEMPT-----------------
Lola PA 1-120 aa    (64) QYD-KHPIFILKDVKYQELRAMMDYMYRGEVNISQDQLAALLKAAESLQIKGLSDNRT-----------------
Ttk 1-131 aa        (65) HPE-KHPIVILKDVPYSDMKSLLDFMYRGEVSVDQERLTAFLRVAESLRIKGLTEVNDDKPSPAAAAA-------
Lolal 1-127 aa      (65) NPS-KHPIIILKDVSYIHLQAILEFMYAGEVNVSQEQLPAFLKTADRLKVKGLAETPSSIKREG-----------
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CP190 BTB alignment with BTB domains of Ttk-group members

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Section 1

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                                  (1) 1         10        20        30        40        50        60        70        81
Ab PB 53-197 aa                   (1) GSALSPATPPPSLNLSHQQQQHQQHYALKWNDFQSSILSSFRHLRDEEDFVDVTLACDERSFTAHKVVLSACSPYFRRLLK
CG41099 PB 33-164 aa              (1) ------------------------SENEESGLSSFLSRLSLTVASLFDKNTYADIYIRSQTRVFPAHKIVLHARSEKWGNDLL
GAF PC 1-131 aa                   (1) -----------------MSLPMNSLYSLTWGDYGTSLVSAIQLLRCHGDLVDCTLAAGGRSFPAHKIVLCAASPFLLDLLK
Lolal 1-127 aa                    (1) -------------------MMSSDQQFFLKWNDFQTNMVTSFRHLRDEKSFTDVTLACEGQTCKAHKMVLSACSPYFKALLE
Bab2 PA 194-313 aa                (1) ----------------------EGQQFCLRWNNYQSNLTNVFDELLQSESFVDVTLSCEGHSIKAHKMVLSACSPYFQALFY
Psq/BTB V 1-141 aa                (1) ----------------MAAVRGHQYFSLRWNNYQNTMTSVFQQLREDLSFVDVTLSCEHGSLKAHKVVLSACSTYFQKLLL
Mod(mdg4) 1-131 aa                (1) --------------------MADDEQFSLCWNNFNTNLSAGFHESLCRGDLVDVSLAAEGQIVKAHRLVLSVCSPFFRKMFT
BtbVII PA 1-119 aa                (1) ---------------------MSVQQFCLRWNNHQPNFISVCSSLLHNGTLVDVTLAAEGRQLQAHKIVLSACSSYFQALFT
Lola PA 1-120 aa                  (1) --------------------MDDDQQFCLRWNNHQSTLISVFDTLLENETLVDCTLAAEGKFLKAHKVVLSACSPYFATLLQ
Ttk 1-131 aa                      (1) -------------------MKMASQRFCLRWNNHQSNLLSVFDQLLHAETFTDVTLAVEGQHLKAHKMVLSACSPYFNTLFV
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Section 2

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                                  (82) 82        90        100       110       120       130       140       158
Ab PB 53-197 aa                   (82) ANPC-EHPIVILRDVRCDDVENLLSFMYNGEVNVSHE-QLPDFLKTAHLLQIRGLADVNGGYPYSK-----------
CG41099 PB 33-164 aa              (60) SNIQ---QLD-WSDLNEDVVLSLLRWIYTDLIDLQNDGLALDLLKAAHRFGLPSLLGICERALVTSVGVRSCIRFYC
GAF PC 1-131 aa                   (65) NTPC-KHPVVMLAGVNANDLEALLEFVYRGEVSVDHA-QLPSLLQAAQCLNIQGLAPQTVTKDDYTTHS--------
Lolal 1-127 aa                    (64) ENPS-KHPIIILKDVSYIHLQAILEFMYAGEVNVSQE-QLPAFLKTADRLKVKGLAETPSSIKREG-----------
Bab2 PA 194-313 aa                (61) DNPC-QHPIIIMRDVSWSDLKALVEFMYKGEINVCQD-QINPLLKVAETLKIRGLAEVSAGR---------------
Psq/BTB V 1-141 aa                (66) ENPCKHPTIILPADIIFTDLKTIIDFVYRGEIDVTES-ELQGLLRTAEQLKIKGLCETAENADDLNDAATATITVSE
Mod(mdg4) 1-131 aa                (63) QMPSNTHAIVFLNNVSHSALKDLIQFMYCGEVNVKQD-ALPAFISTAESLQIKGLTDNDPAPQPPQESSP-------
BtbVII PA 1-119 aa                (62) TNPC-QHPIVILKDVQYDDLKTMVDFMYYGEVNVSQE-QLPHILKTAEMLKIKGLAEMPT-----------------
Lola PA 1-120 aa                  (63) EQYD-KHPIFILKDVKYQELRAMMDYMYRGEVNISQD-QLAALLKAAESLQIKGLSDNRT-----------------
Ttk 1-131 aa                      (64) SHPE-KHPIVILKDVPYSDMKSLLDFMYRGEVSVDQE-RLTAFLRVAESLRIKGLTEVNDDKPSPAAAAA-------
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CG41099 BTB alignment with BTB domains of Ttk-group members

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Section 1

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                    (1) 1         10        20        30        40        50        60        70        83
Ab PB 53-197 aa     (1) GSALSPATPPPSLNLSHQQQQHQQHYALKWNDFQSSILSSFRHLRDEEDFVDVTLACDERSFTAHKVVLSACSPYFRRLLKAN
Lolal 1-127 aa      (1) ------------------MMSSDQQFFLKWNDFQTNMVTSFRHLRDEKSFTDVTLACEGQTCKAHKMVLSACSPYFKALLEEN
GAF PC 1-131 aa     (1) -----------------MSLPMNSLYSLTWGDYGTSLVSAIQLLRCHGDLVDCTLAAGGRSFPAHKIVLCAASPFLLDLLKNT
Mri PA 86-210 aa    (1) ------------------------------------SGMGRLPLPPERITMLVDGVRFTVEQSLLTAHPTTMLGTMFGSGFQFAH
Mod(mdg4) 1-131 aa  (1) --------------------MADDEQFSLCWNNFNTNLSAGFHESLCRGDLVDVSLAAEGQIVKAHRLVLSVCSPFFRKMFTQM
Bab2 PA 194-313 aa  (1) ----------------------EGQQFCLRWNNYQSNLTNVFDELLQSESFVDVTLSCEGHSIKAHKMVLSACSPYFQALFYDN
Psq/BTB V 1-141 aa  (1) ----------------MAAVRGHQYFSLRWNNYQNTMTSVFQQLREDLSFVDVTLSCEHGSLKAHKVVLSACSTYFQKLLLEN
BtbVII PA 1-119 aa  (1) --------------------MSVQQFCLRWNNHQPNFISVCSSLLHNGTLVDVTLAAEGRQLQAHKIVLSACSSYFQALFTTN
Lola PA 1-120 aa    (1) --------------------MDDDQQFCLRWNNHQSTLISVFDTLLENETLVDCTLAAEGKFLKAHKVVLSACSPYFATLLQEQ
Ttk 1-131 aa        (1) ------------------MKMASQRFCLRWNNHQSNLLSVFDQLLHAETFTDVTLAVEGQHLKAHKMVLSACSPYFNTLFVSH
```

Section 2

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                    (84) 84      90        100       110       120       130       140       150       166
Ab PB 53-197 aa     (84) PCEHP-IVILRDVRCDDVENLLSFMYNGEVNVSHEQ--------------LPDFLKTAHLLQIRGLADVNGGYPYSK-------
Lolal 1-127 aa      (66) PSKHP-IIILKDVSYIHLQAILEFMYAGEVNVSQEQ--------------LPAFLKTADRLKVKGLAETPSSIKREG-------
GAF PC 1-131 aa     (67) PCKHP-VVMLAGVNANDLEALLEFVYRGEVSVDHAQ--------------LPSLLQAAQCLNIQGLAPQTVTKDDYTTHS----
Mri PA 86-210 aa    (50) TNERGEYDVADGISHLVFRAILEYYKSGVIRCPPTVSVPELKEACDYLLIPFDATTVRCQNLRGLLHELSNEGARQ-------
Mod(mdg4) 1-131 aa  (65) PSNTHAIVFLNNVSHSALKDLIQFMYCGEVNVKQDA--------------LPAFISTAESLQIKGLTDNDPAPQPPQESSP---
Bab2 PA 194-313 aa  (63) PCQHP-IIIMRDVSWSDLKALVEFMYKGEINVCQDQ--------------INPLLKVAETLKIRGLAEVSAGR-----------
Psq/BTB V 1-141 aa  (68) PCKHPTIILPADIIFTDLKTIIDFVYRGEIDVTESE--------------LQGLLRTAEQLKIKGLCETAENADDLNDAATATI
BtbVII PA 1-119 aa  (64) PCQHP-IVILKDVQYDDLKTMVDFMYYGEVNVSQEQ--------------LPHILKTAEMLKIKGLAEMPT-------------
Lola PA 1-120 aa    (65) YDKHP-IFILKDVKYQELRAMMDYMYRGEVNISQDQ--------------LAALLKAAESLQIKGLSDNRT-------------
Ttk 1-131 aa        (66) PEKHP-IVILKDVPYSDMKSLLDFMYRGEVSVDQER--------------LTAFLRVAESLRIKGLTEVNDDKPSPAAAAA---
```

Mri BTB alignment with BTB domains of Ttk-group members