**Table S4. Comparison of PPIase sequences between *L. major and L. donovani.***

| *L. major* | | | | | *L. donovani* | | | | | Identity (%) |
|---|---|---|---|---|---|---|---|---|---|---|
| Name | Length (aa) | kDa | PPIase domain Region | (aa) | Name | Length (aa) | kDa | PPIase domain Region | (aa) | |
| LmCyP19 | 177 | 18.8 | 17-176 | 159 | LdCyP19 | 177 | 18.8 | 17-176 | 159 | 96 |
| LmCyP20.3 | 187 | 20.3 | 30-186 | 156 | LdCyP20.3 | 192 | 20.4 | 4-156 | 152 | 88.5 |
| LmCyP20.4 | 192 | 23 | 18-156 | 138 | LdCyP20.4 | 187 | 20.34 | 30-186 | 156 | 82.9 |
| LmCyP24 | 220 | 24 | 50-216 | 166 | LdCyP24 | 229 | 24.5 | 64-223 | 159 | 83.3 |
| LmCyP24.6 | 229 | 24.6 | 64-223 | 159 | LdCyP25 | 229 | 25.2 | 30-194 | 164 | 98.7 |
| LmCyP25 | 229 | 25.2 | 30-194 | 164 | LdCyP26 | 247 | 25.5 | 1-160 | 160 | 98.7 |
| LmCyP26 | 247 | 25.5 | 1-160 | 160 | LdCyP27 | 242 | 26.6 | 71-242 | 171 | 93.9 |
| LmCyP26.5 | 242 | 26.4 | 71-242 | 171 | LdCyP28 | 245 | 27.5 | 56-216 | 160 | 93 |
| LmCyP27 | 245 | 27.5 | 56-216 | 160 | LdCyP28.6 | 258 | 28.6 | 88-254 | 166 | 98.4 |
| LmCyP29 | 266 | 28.8 | 83-265 | 182 | LdCyP29 | 266 | 28.8 | 83-265 | 182 | 93.2 |
| LmCyP32 | 295 | 31.4 | 27-193 | 166 | LdCyP32 | 296 | 31.9 | 27-193 | 166 | 91.2 |
| LaCyP36 | 335 | 36.1 | 153-330 | 177 | LdCyP36 | 334 | 36.09 | 152-329 | 177 | 93.7 |
| LmCyP38 | 354 | 38.4 | 7-174 | 167 | LdCyP38.4 | 354 | 38.4 | 7-174 | 167 | 96 |
| LmCyP39 | 366 | 38.6 | 80-243 | 163 | LdCyP39 | 366 | 38.7 | 80-243 | 163 | 94 |
| LmCyP48 | 444 | 48.5 | 222-376 | 154 | LdCyP48.5 | 444 | 48.5 | 222-376 | 154 | 94 |
| LmCyP49 | 462 | 49 | 58-238 | 180 | LdCyP49 | 461 | 48.8 | 59-239 | 180 | 87.4 |
| LmCyP108 | 1020 | 108.1 | 863-1017 | 154 | LdCyP108 | 1022 | 108.3 | 865-1019 | 154 | 93.8 |
| LmFKBP-11.8 | 111 | 11.8 | 23-111 | 88 | LdFKBP-11.8 | 111 | 11.8 | 23-111 | 88 | 98.2 |
| LmFKBP-11.9 | 109 | 11.9 | 19-109 | 90 | LdFKBP-11.9 | 109 | 11.9 | 19-109 | 90 | 96.3 |
| LmFKBP-17.3 | 159 | 17.2 | 49-135 | 86 | LdFKBP-17 | 159 | 17.3 | 49-135 | 86 | 93.7 |
| LmFKBP-23 | 202 | 22.8 | 81-168 | 87 | LdFKBP-22 | 201 | 22.7 | 80-167 | 87 | 96.5 |
| LmFKBP-48 | 432 | 47.6 | 56-144 | 88 | LdFKBP-47 | 432 | 47.8 | 56-144 | 88 | 96.1 |
| LmPar13 | 115 | 12.5 | 3-115 | 112 | LdPar12 | 115 | 12.6 | 3-115 | 112 | 93.9 |
| LmPar47 | 440 | 46.5 | 313-440 | 127 | LdPar17 | 160 | 17.4 | 33-160 | 127 | 34.3 |

The numbers in each region indicate the starting and ending amino acid position of the PPIase domain. The percentage of identity was obtained by comparing the amino acid sequences of *L. major* PPIases with the *L. donovani* PPIases using the EMBOSS Needle tool from EMBL-EBI [42] (https://www.ebi.ac.uk/services). The molecular weight (kDa) and amino acids sequence were obtained from the UniProt database [40] (https://www.uniprot.org/, Release 2023_02).