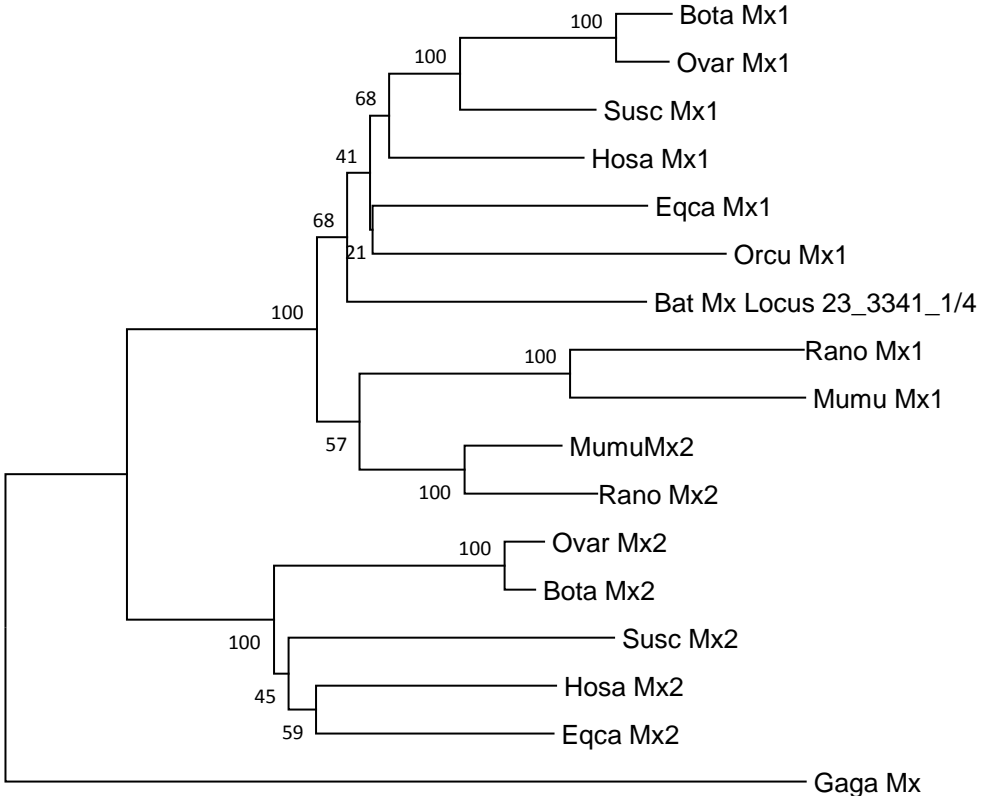


A



B

GTP binding Dynamine family signature

```

BatMx1  MNPPTVKRSLKVKVKNHNHLASASSRPLP.DAKVSEENLEKGTESLSCSYEEKIRPCIDLIDSLRALGVEQDLALPAIAVIGDQSSGKSSVLEALSGVALPRGSGIVTRCPLVKL
humanMx1 . . . M-VS . . . E-DIAKADP-A--H-L-LNG--T-AQK-PGSAV-NN--Q-----V-----T-----
mouseMx1 .....
```

GTP binding

```

BatMx1  120. . 130. . 140. . 150. . 160. . 170. . 180. . 190. . 200. . 210. . 220. . 230. .
humanMx1 RKLRDGDGDKVSKYKQDIEMSDASEVEEERKAQDVIAGVGMDSHELINLEVVSSPHVPLDLDLPGIARVAVGNQPDIGAQIKALIRKYIQRQQTINLVVPCNVDIATTEALSM
mouseMx1 K--VNE-K-R-----Q-Y---I-----K-N---NA--E-G-----T-I--RD-----T-----A--YK-T-K-----E-S-----S-----
---KE-E-R-----D-I-V-L-P-----A-N-G-NF-----LG-DK--S-D---N-----T-----A--R--R--R--KT--K-E-----S-----
```

GTP binding

```

BatMx1  240. . 250. . 260. . 270. . 280. . 290. . 300. . 310. . 320. . 330. . 340. . 350. .
humanMx1 AQEVDPDGDRITIGLTKPDLVDKGTENKVVVVRNLVCHLKKGYMIVKCRGQDQIQEQLSLTEALQKEKAFEDHPFRNLLDEGKATIPCLAERLTTELIAHICKSLPQLENIKEKQQ
mouseMx1 -----E-----D-----F-----E-D---S---R-I--N-Y-D-E-----V-----K-S---T-----L--Q---NSSH-
-----E-----V-----R-A-G-L-M---YP-----F---QV--K--SY-SI--ED---V-----E--TS-----L--DQ--NSSH-
```

Loop 2

```

BatMx1  360. . 370. . 380. . 390. . 400. . 410. . 420. . 430. . 440. . 450. . 460. . 470. .
humanMx1 SITEELQMYGMETPEEENKMFPLDKLNAFNQGLITLIQGEIVKESNTRLFTKIRKEFNWNSKVIENNFDGDAYVNIICKFENQYRGRELPGFVNYKTFENILKQQIKTLEEPADV
mouseMx1 R-----R--VDI--D-----I---D-TA-M---T-GEEDI---RL-H--HK--TI-----E-HKILSRK-Q-----R--T-V-----A-----
--AS---K--ADI--DDRTR-S--VN-IS---RN-MN--AQ-T-SEGDS---L-N--LA-DDH--EY-KKDSPE-QSKMKE-----D-A-S---KRV-A---S--N
```

Loop 4

```

BatMx1  480. . 490. . 500. . 510. . 520. . 530. . 540. . 550. . 560. . 570. . 580. . 590. .
humanMx1 MLHTVTQMVMVLAFTVVSQKNYSEFFNLKVKSKIEDIKTEQEREAEKSIIRLHFQMEQIVVYQDTHYQRLGRLKIREKKEKEEERRRTRLGRITICESS...SSYNSLDEIFQHLIAVHQET
mouseMx1 -----D--R---D--I--FE-----HRTA-----RA-----G-L-----QV-RGA-Q-V-----L-E-KKKKSWDFPGAFQSS--. . .ATDS-ME-----M-----A
--RR--K--QT--VKILSNDFGD-L-CCTA---KE-RLN--K---NL-----QV-KET-KT-----A---KTKALINFA-FQNN-QFFQKGLTTT-MT---K--Y--C
```

Leucine zipper repeats

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BatMx1  600. . 610. . 620. . 630. . 640. . 650. . 660. . 670.
humanMx1 GNRLSTHPIPTIQFFVLQSFQQQLQKAMLQLLDKQKQYDMLKERSDTCRKRKFLKEQHRRLVQARHQLAKPFG
mouseMx1 SK-I-S---I---M--TY-----DT-S-----S-----RLA--T---RR--Q---
RRNIGRQ---I--Y-I-KT--EEIE-M-----TSKCS-F-E-Q---RE-K---RRL--DE--QK---SD
```