

Molecular Insights into the Potential Insecticidal Interaction of β -Dihydroagarofuran Derivatives with the Subunit H of V-ATPase

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Table of contents

Figure S1	S1
Figure S2	S2

CLUSTAL O(1.2.4) multiple sequence alignment

```

query      MANIGDGNVSQ LMPPLGDEKIDMIAATSALQIRASEIRQENITWSSYLQSQMITQRDHDF
1ho8       -----GSMGATKILM--DSTHFNEIRSIIRSRVAWDALARSEELSEIDAST
              :*  ** *   :: ::   * **...:*. :   *:  ::: * .

```

```

query      IVNL-----DRGQHKDLPDKNP-----ELCAEVFLN---MLTHISKDNTIQYLLVMID
1ho8       AKALESILVKKNIGDG--LSSSNNAHSGFKVNGKTLIPLIHLLSTSDNEDCKKSVQNLIA
              *      : *:   * ..*      :: . : : :   *:  . : : :   : :   :*

```

```

query      DILSEDK---NRVKIFREGR-----TGNAWQPFLNLLNRQDEFVQHMT--ARI I
1ho8       ELLSSDKYGDDTVKFFQEDPKQLEQLFDVSLKGDFQTVLISGFNVVSLLVQNGLHNKVLV
              ::**.*  :  **:*:*.      .*:      :.  :*  .  :*:      . : :

```

```

query      AKLACWHTTVMERSDLLFYLSWLKDQLKLNNNEYVQSVARCLQM---MLRVDEYRFA---
1ho8       EK-----LLKNNNLINI-----LQNIEQMDTCYVCIRLLQELAVIPEYRDVIWL
              *      : : : . : *:      *:* *  : :   * : :   :   :  *** .

```

```

query      -----FLTV----DGISTLLAILASRVNFQVQYQLTFCLWVLTfNPLLAekMnK
1ho8       HEKKFMPTLfkILQRATDSQLATRIVATNSNHLGIQLQYHsLLLlWLLTFNPVFANELVQ
              :*      :   : : *  . : : . : *:*:  :   :*:*****:*: : : :

```

```

query      FNAIPI--LADILSDSVKEKVTRIVLAVFRNLIEKPenQQVSKEHCIAmVQCKVLKQLSI
1ho8       KYLSDFLDLLKLVKITIKESRLCISiILQCCSTRVKQHKKVI-KQLLLLGNALPTVQS
              :   *  . : : .  :*:*:*:*:  : : : :   :   .  :*:  .      : :   :.*  .

```

```

query      LEQKRSDDEDIMNDVDFLNERLQTSVQDLSSFDQYATEVKSGRLEWSPVHKSAKFWRENA

```

```

1ho8      LSEKYSDEELRQDISNLKEILENEYQELTSFDEYVAELDSKLLCWSPPHVDNGFWSdni
          *.::: .**:: :*:. ** *:. **:*:***:*. :*:. *  * *** * .  ** :*

query     IRLNERGQELLRTLVLHLEK-----SKDPVVLAVACYDVGEYVRHYPRGKHIEQL
1ho8      DEFKKDNYKIFRQLIELLQAKVRNGDVNAKQEKIIIQVALNDITHVVELLPESIDVLDKT
          .::: . ::* *:.**:          .:: :*: ** *: . *  *.. ::::

query     GKGQRMHLLSHEDPNVRYEALLAVQKLMVHNWEYLKGQLEKEQIDKQAGTVVGAKA
1ho8      GKGADIMELLNHSDSRVKYEALKATQAIIGYTFK-----
          ***  :*.**.*.* .*:*** *.* :: :.::

```

Figure S1. Multiple sequence alignment of the V-ATPase subunit H. from *M. separate* (query) and *yeast* (PDB:1ho8)

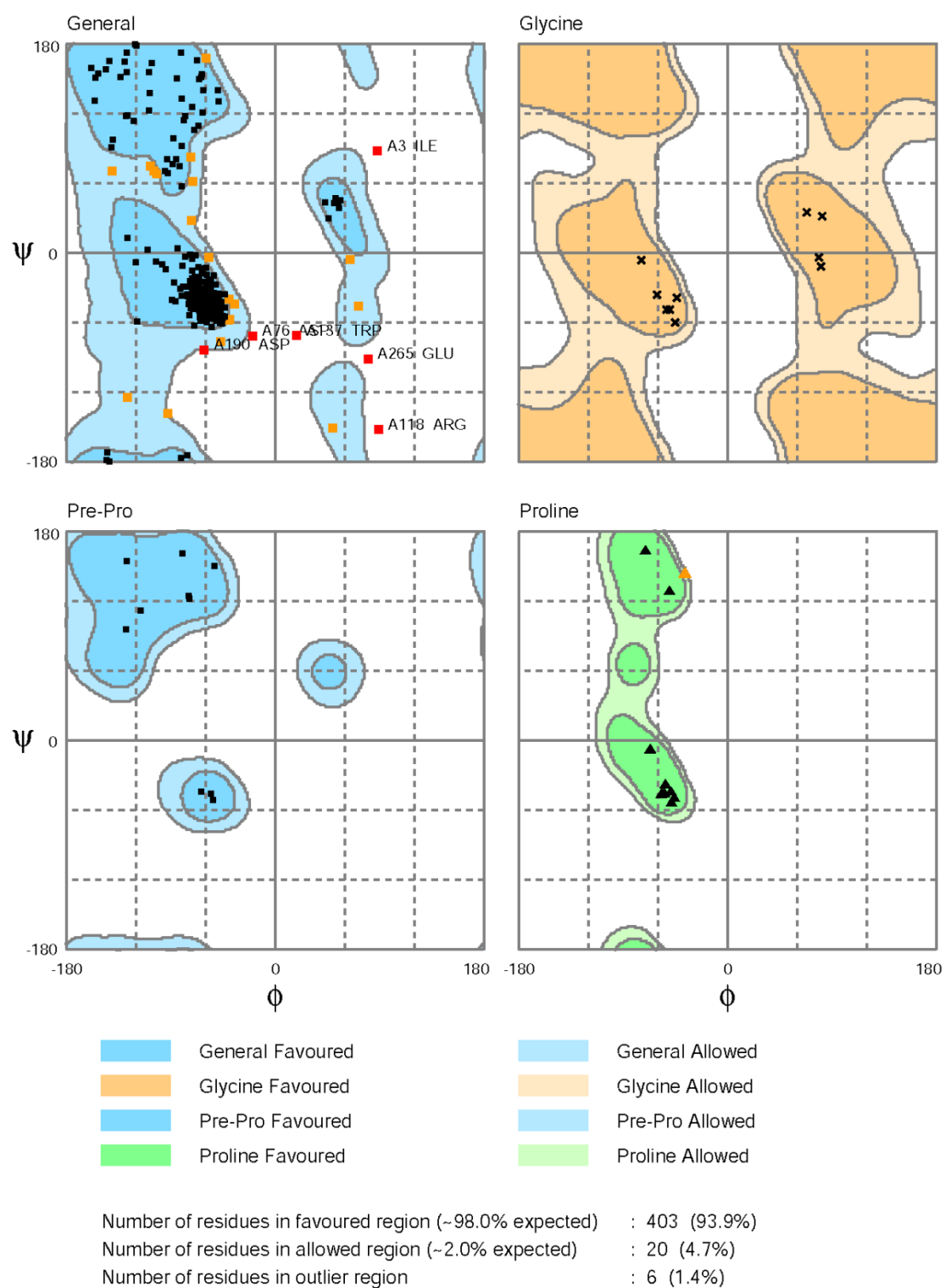


Figure S2. Assessment of the Ramachandran plot of the model structure of the *M. separata* V-ATPase subunit H.