

**Supplemental Table 3:** The following sequences from Entrez, Ensembl and UniProt databases were utilized in the alignments.

| SEQUENCES        | Entrez         | Ensembl            | UniProt |
|------------------|----------------|--------------------|---------|
| Ag ZIP5/6/10     | XP_317935.4    |                    |         |
| Dm ZIP5/6/10 (1) | NP_001097608.1 |                    |         |
| Dm ZIP5/6/10 (2) | NP_523974.3    |                    |         |
| Dr PrP           | NP_991149.1    |                    |         |
| Dr Sho2          |                | ENSDARP00000074841 |         |
| Dr ZIP5          | XP_690258.2    |                    |         |
| Dr ZIP6          | NP_001001591.1 |                    |         |
| Dr ZIP8          |                | ENSDARG00000028214 |         |
| Dr ZIP10         | NP_956965.1    |                    |         |
| Dr ZIP14         | XP_001340102.2 |                    |         |
| Ga PrP-1         | CAL64057.1     |                    |         |
| Gg PrP           |                | ENSGALP00000040285 |         |
| Hm ZIP12         | XP_002160698.1 |                    |         |
| Hs PrP           |                | ENSP00000368752    |         |
| Hs ZIP4          |                | ENSP00000276833    |         |
| Hs ZIP5          |                | ENSP00000266980    |         |
| Hs ZIP6          |                | ENSP00000269187    |         |
| Hs ZIP8          |                | ENSP00000378310    |         |
| Hs ZIP10         |                | ENSP00000352655    |         |
| Hs ZIP12         |                | ENSP00000366588    |         |
| Hs ZIP13         |                | ENSP00000346956    |         |
| Hs ZIP14         |                | ENSP00000352779    |         |
| Mm PrP           | NP_035300.1    |                    |         |
| Mm Sho           | CAF18554.1     |                    |         |
| Mm Dpl           | AAF02544.1     |                    |         |
| Mm ZIP4          |                | ENSMUSP00000073134 |         |
| Mm ZIP5          | AAH28990.1     |                    |         |
| Mm ZIP6          | NP_631882.2    |                    |         |
| Mm ZIP8          |                | ENSMUSP00000029810 |         |
| Mm ZIP10         |                | ENSMUSP00000027131 |         |
| Mm ZIP12         |                | ENSMUSP00000080911 |         |
| Mm ZIP13         |                | ENSMUSP00000073263 |         |
| Mm ZIP14         |                | ENSMUSP00000066108 |         |
| Tn PrP-1         |                |                    | Q4SJ93  |
| Tr PrP-1         | AAN38988.1     |                    |         |
| Tr Sho1          | CAG34291.1     |                    |         |
| Tr Sho2          | CAG34292.1     |                    |         |
| Tr ZIP6          |                | ENSTRUP00000006592 |         |
| Tr ZIP8          |                | ENSTRUP00000045288 |         |
| Tr ZIP10         |                | ENSTRUP00000007404 |         |
| Tr ZIP12         |                | ENSTRUP00000019248 |         |
| Tr ZIP14         |                | ENSTRUP00000038591 |         |
| Ts PrP           |                |                    | Q9I9C0  |
| Xl PrP           | NP_001082180.1 |                    |         |

- Ag → *Anopheles gambiae* (African malaria mosquito)  
Dm → *Drosophila melanogaster* (fruit fly)  
Dr → *Danio rerio* (zebrafish)  
Ga → *Gasterosteus aculeatus* (three-spined stickleback)  
Gg → *Gallus gallus* (chicken)  
Hm → *Hydra magnipapillata* (hydra)  
Hs → *Homo sapiens* (human)  
Mm → *Mus musculus* (house mouse)  
Tn → *Tetraodon nigroviridis* (spotted green pufferfish)  
Tr → *Takifugu rubripes* (Japanese pufferfish)  
Ts → *Trachemys scripta* (red-eared slider turtle)  
Xl → *Xenopus laevis* (African clawed frog)