Figure S2. Alignment of the X2 modules among different species. The description of above aligned X2 modules is listed in Table S1.

| X2_C         | WP_014313401.1:1109-1 | WP_00462334.1:1201-1 | WP_008006619.1:1128-2 | PYGB86545.1:1168-1245 | QNU52826.1:2318-2394 | HNT57230.1:196-274 | EMS73510.1:1-66 | TFFB244.1:57-129 | WP_18257592.1:829-9 | WP_127531582.1:523-6 | WP_08176777.1:613-6 | WP_174818588.1:767-8 | WP_178943383.1:865-9 | HAB60394.1:771-853 | WP_013291799.1:1379-9 |
|--------------|----------------------|----------------------|------------------------|------------------------|----------------------|---------------------|-----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|---------------------|
| X2_N         |                     |                      |                        |                        |                      |                     |                       |                      |                     |                      |                      |                      |                      |                     |
| consensus>50 | stlavgtsr...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgt...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgtv...tvfgt...