**Table 1.** List of the species and accession numbers of the protein sequences used in protein alignment and phylogenetic analyses.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Species** | **GenBank Accession No./Accessions/accession numbers** | | | |
| **ADO** | **CDO** | **CSAD** | **GAD** |
|  |  |  |  |  |
| *Hermetia illucens* | MT180129 | MT180130 | MT180131 | MT180132 |
| *Bactrocera dorsalis* | XP\_011198104.1 | XP\_011207266.1 | XP\_011199833.1 | XP\_011201394.1 |
| *Bactrocera latifrons* | XP\_018788081.1 | XP\_018783155.1 | XP\_018783466.1 | XP\_018801723.1 |
| *Bactrocera oleae* | XP\_014085146.1 | XP\_014092267.1 | XP\_014089047.1 |  |
| *Ceratitis capitata* | XP\_004523823.1 | XP\_012155781.1 | XP\_004533948.1 | XP\_004525301.1 |
| *Drosophila bipectinata* | XP\_017864367.1 | XP\_017092655.1 | XP\_017108775.1 | XP\_017092368.1 |
| *Drosophila erecta* | XP\_001971370.1 | XP\_026836311.1 | XP\_001969575.1 |  |
| *Drosophila hydei* | XP\_023174226.2 |  | XP\_023163833.2 |  |
| *Drosophila melanogaster* |  |  |  | NP\_523914.2 |
| *Drosophila navojoa* | XP\_017956873.1 |  | XP\_030244339.1 |  |
| *Drosophila novamexicana* | XP\_030570068.1 | XP\_030558126.1 | XP\_030569880.1 |  |
| *Drosophila serrata* | XP\_020814695.1 |  | XP\_020810126.1 |  |
| *Drosophila willistoni* | XP\_002065723.1 | XP\_002063538.1 | XP\_002066752.1 | XP\_015033292.1 |
| *Lucilia cuprina* | XP\_023295661.1 | XP\_023302836.1 | XP\_023301249.1 | XP\_023301136.1 |
| *Musca domestica* | XP\_005176921.1 | XP\_011291169.1 | XP\_005188956.2 | XP\_011296520.1 |
| *Rhagoletis zephyria* | XP\_017464925.1 | XP\_017483358.1 | XP\_017483023.1 |  |
| *Stomoxys calcitrans* | XP\_013114268.1 | XP\_013097303.1 | XP\_013110104.1 | XP\_013117159.1 |
| *Zeugodacus cucurbitae* | XP\_011195667.1 | XP\_011190605.1 | XP\_011190747.1 | XP\_011179703.1 |
|  |  |  |  |  |
| *Homo sapiens* | NP\_116193.2 | NP\_001792.2 | NP\_057073.4 | NP\_000808.2 |
| *Mus musculus* | NP\_001005419.2 | NP\_149026.1 | XP\_017172101.1 | NP\_032103.2 |
| *Danio rerio* | NP\_001008634.1 | NP\_957035.2 | NP\_001007349.1 | NP\_919400.1 |