**Table S3** The putative proteins encoding by *doeBDAC* gene cluster detected in the genome of *Mm. alcaliphilum* 20Z

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ORF | Number of amino acids | kDa | Most probable coding protein | Identity with the *H. elongata* protein |
| MEALZ\_3978 | 391 | 43.9 kDa | DoeA, ectoine hydrolase | 42% |
| MEALZ\_3976 | 393 | 42.6 kDa  | DoeB, ectoine deacetylase | 22% |
| MEALZ\_3977 | 425 | 46.2-kDa | DoeD, transaminase  | 36% |
| MEALZ\_3979 | 453 | 48.5 kDa  | DoeC, aspartate-semialdehyde dehydrogenase | 49% |