

**Supplementary Table S2.** Physicochemical properties of the CXE family of *S. baicalensis*

| Gene Name | AA  | Molecular<br>Weight (Da) | Aliphatic<br>Index | Instability<br>Index | pI   | GRAVY  |
|-----------|-----|--------------------------|--------------------|----------------------|------|--------|
| SbCXE10   | 331 | 36880.1                  | 86.98              | 46.18                | 5.37 | -0.16  |
| SbGID1A   | 342 | 38501.53                 | 87.49              | 40.67                | 6.36 | -0.271 |
| SbCXE22   | 236 | 26226.97                 | 87.29              | 59.24                | 5.59 | -0.164 |
| SbCXE36   | 265 | 29182.03                 | 76.23              | 48.75                | 5.36 | -0.314 |
| SbCXE9    | 333 | 37193.45                 | 84.98              | 54.72                | 5.52 | -0.206 |
| SbCXE21   | 322 | 35690.37                 | 91.46              | 38.54                | 6.72 | -0.036 |
| SbCXE26   | 325 | 35997.62                 | 88.83              | 37.23                | 5.36 | -0.117 |
| SbCXE14   | 314 | 35015.27                 | 91.91              | 36.35                | 5.13 | -0.079 |
| SbCXE37   | 228 | 25769.43                 | 83.86              | 47.75                | 9.6  | -0.318 |
| SbCXE12   | 289 | 32594.6                  | 94.81              | 38.32                | 7.68 | -0.225 |
| SbCXE25   | 252 | 28605.9                  | 90.2               | 36.26                | 7.72 | -0.321 |
| SbCXE6    | 122 | 13205.44                 | 99.92              | 53.55                | 6.03 | 0.244  |
| SbCXE5    | 256 | 27596.02                 | 72.34              | 51.39                | 8.82 | -0.332 |
| SbCXE39   | 87  | 9949.48                  | 90.8               | 24.56                | 6.39 | 0.055  |
| SbCXE4    | 429 | 46427.5                  | 79.86              | 44.55                | 8.05 | -0.298 |
| SbCXE33   | 165 | 18039.48                 | 96.91              | 50.14                | 5.83 | -0.098 |
| SbCXE16   | 579 | 64524.45                 | 86.42              | 40.56                | 6.42 | -0.204 |
| SbCXE11   | 348 | 39050.36                 | 85.52              | 42.93                | 6.46 | -0.216 |
| SbCXE17   | 324 | 35923.92                 | 85.49              | 42.38                | 5.03 | -0.199 |
| SbGID1B   | 331 | 37492.4                  | 87.1               | 35.72                | 6.2  | -0.283 |
| SbCXE31   | 328 | 35695.71                 | 89.24              | 42.81                | 6.31 | -0.136 |
| SbCXE7    | 319 | 36578.72                 | 79.75              | 48.87                | 6.32 | -0.241 |
| SbCXE28   | 356 | 39912.66                 | 89.8               | 34.83                | 7.79 | -0.208 |
| SbCXE34   | 303 | 33345.77                 | 78.51              | 38.99                | 5.53 | -0.227 |
| SbCXE13   | 366 | 41420.61                 | 94.86              | 38.61                | 7.72 | -0.072 |
| SbCXE19   | 319 | 35215                    | 87.74              | 39.86                | 5.34 | -0.211 |
| SbCXE30   | 322 | 36342.33                 | 98.14              | 32.07                | 5.41 | -0.039 |
| SbCXE32   | 145 | 16297.64                 | 93.72              | 41.17                | 5.63 | -0.081 |
| SbCXE38   | 316 | 35247                    | 87.88              | 36.22                | 5.9  | -0.152 |
| SbCXE3    | 416 | 45716.69                 | 94.93              | 42.64                | 8.26 | -0.016 |
| SbCXE8    | 343 | 38380.8                  | 84.43              | 45.75                | 6.21 | -0.18  |
| SbCXE24   | 253 | 28204.84                 | 79.8               | 55.08                | 5.43 | -0.216 |
| SbCXE23   | 330 | 36002.14                 | 81.33              | 28.87                | 8.54 | -0.109 |
| SbCXE27   | 268 | 30176.32                 | 82.2               | 33.59                | 6.8  | -0.313 |
| SbCXE29   | 322 | 36342.33                 | 98.14              | 32.07                | 5.41 | -0.039 |
| SbCXE20   | 321 | 35650.5                  | 90.81              | 28.47                | 5.54 | -0.134 |
| SbCXE18   | 387 | 43355.62                 | 79.64              | 40.54                | 8.17 | -0.274 |
| SbCXE35   | 196 | 22064.23                 | 91.07              | 38.32                | 5.72 | -0.256 |
| SbCXE15   | 328 | 36633.18                 | 94.54              | 36.36                | 5.27 | -0.002 |
| SbCXE41   | 235 | 26090.98                 | 85.96              | 44.13                | 6.7  | -0.112 |
| SbCXE43   | 71  | 7973.19                  | 89.3               | 40.07                | 5.08 | 0.073  |
| SbCXE42   | 71  | 7973.19                  | 89.3               | 40.07                | 5.08 | 0.073  |
| SbCXE40   | 221 | 25159.88                 | 77.15              | 36.69                | 8.9  | -0.292 |