**APPENDIX 1**

**TABLE 1.** Antigenicity, surface accessibility, and hydrophilicity of epitopes of DENV-1 E protein.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **GenBank Accession No.** | **Position** |  | **Antigenicity** | **Hydrophilicity** | **Surface accessibility** | **Rank according to antigenicity** |
| **AAR01106.1** | **Start** | **End** | **Peptide Sequence** | **Cut-off****= 1.029** | **Cut-off****= 1.402** | **Cut-off = 1** |
|  | 242 | 251 | TAHAKKQEVV | 1.063 | 2.93 | 1.58 | 1 |
|  | 321 | 330 | LVQVKYEGTD | 1.062 | 2.19 | 1.215 | 2 |
|  | 141 | 150 | VTVHTGDQHQ | 1.056 | 3.49 | 1.257 | 3 |
|  | 142 | 151 | TVHTGDQHQV | 1.056 | 3.49 | 1.257 | 4 |
|  | 290 | 299 | DKLTLKGVSY | 1.056 | 1.48 | 1.207 | 5 |
| **AAR01107.1** |  |  |  | **Cut-off****= 1.029** | **Cut-off****= 1.41** | **Cut-off = 1** |  |
|  | 242 | 251 | TAHAKKQEVV | 1.063 | 2.93 | 1.54 | 1 |
|  | 321 | 330 | LVQVKYEGTD | 1.062 | 2.19 | 1.184 | 2 |
|  | 141 | 150 | VTVHTGDQHQ | 1.056 | 3.49 | 1.225 | 3 |
|  | 142 | 151 | TVHTGDQHQV | 1.056 | 3.49 | 1.225 | 4 |
|  | 290 | 299 | DKLTLKGVSY | 1.056 | 1.48 | 1.176 | 5 |
| **AAR01108.1** |  |  |  | **Cut-off****= 1.03** | **Cut-off****= 1.404** | **Cut-off = 1** |  |
|  | 242 | 251 | TAHAKKQEVV | 1.063 | 2.93 | 1.546 | 1 |
|  | 321 | 330 | LVQVKYEGTD | 1.062 | 2.19 | 1.189 | 2 |
|  | 141 | 150 | VTVHTGDQHQ | 1.056 | 3.49 | 1.229 | 3 |
|  | 142 | 151 | TVHTGDQHQV | 1.056 | 3.49 | 1.229 | 4 |
|  | 290 | 299 | DKLTLKGVSY | 1.056 | 1.48 | 1.18 | 5 |
| **AAR01109.1** |  |  |  | **Cut-off****= 1.029** | **Cut-off****= 1.412** | **Cut-off = 1** |  |
|  | 242 | 251 | TAHAKKQEVV | 1.063 | 2.93 | 1.557 | 1 |
|  | 321 | 330 | LVQVKYEGTD | 1.062 | 2.19 | 1.197 | 2 |
|  | 141 | 150 | VTVHTGDQHQ | 1.056 | 3.49 | 1.238 | 3 |
|  | 142 | 151 | TVHTGDQHQV | 1.056 | 3.49 | 1.238 | 4 |
|  | 290 | 299 | DKLTLKGVSY | 1.056 | 1.48 | 1.189 | 5 |
| **AAR01110.1** |  |  |  | **Cut-off****= 1.03** | **Cut-off****= 1.385** | **Cut-off = 1** |  |
|  | 242 | 251 | TAHAKKQEVV | 1.063 | 2.93 | 1.555 | 1 |
|  | 321 | 330 | LVQVKYEGTD | 1.062 | 2.19 | 1.196 | 2 |
|  | 141 | 150 | VTVHTGDQHQ | 1.056 | 3.49 | 1.236 | 3 |
|  | 142 | 151 | TVHTGDQHQV | 1.056 | 3.49 | 1.236 | 4 |
|  | 290 | 299 | DKLTLKGVSY | 1.056 | 1.48 | 1.187 | 5 |
| **AAR01111.1** |  |  |  | **Cut-off****= 1.03** | **Cut-off****= 1.404** | **Cut-off = 1** |  |
|  | 242 | 251 | TAHAKKQEVV | 1.063 | 2.93 | 1.556 | 1 |
|  | 321 | 330 | LVQVKYEGTD | 1.062 | 2.19 | 1.196 | 2 |
|  | 141 | 150 | VTVHTGDQHQ | 1.056 | 3.49 | 1.237 | 3 |
|  | 142 | 151 | TVHTGDQHQV | 1.056 | 3.49 | 1.237 | 4 |
|  | 290 | 299 | DKLTLKGVSY | 1.056 | 1.48 | 1.188 | 5 |
| **QMT58614.1** |  |  |  | **Cut-off****= 1.03** | **Cut-off****= 1.404** | **Cut-off = 1** |  |
|  | 242 | 251 | TAHAKKQEVV | 1.063 | 2.93 | 1.557 | 1 |
|  | 321 | 330 | LVQVKYEGTD | 1.062 | 2.19 | 1.197 | 2 |
|  | 141 | 150 | VTVHTGDQHQ | 1.056 | 3.49 | 1.238 | 3 |
|  | 142 | 151 | TVHTGDQHQV | 1.056 | 3.49 | 1.238 | 4 |
|  | 290 | 299 | DKLTLKGVSY | 1.056 | 1.48 | 1.188 | 5 |
| **QMT58617.1** |  |  |  | **Cut-off****= 1.03** | **Cut-off****= 1.404** | **Cut-off = 1** |  |
|  | 242 | 251 | TAHAKKQEVV | 1.063 | 2.93 | 1.556 | 1 |
|  | 321 | 330 | LVQVKYEGTD | 1.062 | 2.19 | 1.196 | 2 |
|  | 141 | 150 | VTVHTGDQHQ | 1.056 | 3.49 | 1.237 | 3 |
|  | 142 | 151 | TVHTGDQHQV | 1.056 | 3.49 | 1.237 | 4 |
|  | 290 | 299 | DKLTLKGVSY | 1.056 | 1.48 | 1.188 | 5 |
| **BCG29720.1** |  |  |  | **Cut-off****= 1.03** | **Cut-off****= 1.379** | **Cut-off = 1** |  |
|  | 242 | 251 | TAHAKKQEVV | 1.063 | 2.93 | 1.562 | 1 |
|  | 321 | 330 | LVQVKYEGTD | 1.062 | 2.19 | 1.201 | 2 |
|  | 141 | 150 | VTVHTGDQHQ | 1.056 | 3.49 | 1.242 | 3 |
|  | 142 | 151 | TVHTGDQHQV | 1.056 | 3.49 | 1.242 | 4 |
|  | 290 | 299 | DKLTLKGVSY | 1.056 | 1.48 | 1.192 | 5 |
| **BCG29747.1** |  |  |  | **Cut-off****= 1.03** | **Cut-off****= 1.402** | **Cut-off = 1** |  |
|  | 242 | 251 | TAHAKKQEVV | 1.063 | 2.93 | 1.552 | 1 |
|  | 321 | 330 | LVQVKYEGTD | 1.062 | 2.19 | 1.194 | 2 |
|  | 141 | 150 | VTVHTGDQHQ | 1.056 | 3.49 | 1.234 | 3 |
|  | 142 | 151 | TVHTGDQHQV | 1.056 | 3.49 | 1.234 | 4 |
|  | 290 | 299 | DKLTLKGVSY | 1.056 | 1.48 | 1.185 | 5 |

**TABLE 2.** Antigenicity, surface accessibility, and hydrophilicity of epitopes of DENV-2 E protein.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **GenBank Accession No.** | **Position** |  | **Antigenicity** | **Hydrophilicity** | **Surface accessibility** | **Rank according to antigenicity** |
| **AAR98806.1** | **Start** | **End** | **Peptide Sequence** | **Cut-off****= 1.025** | **Cut-off****= 1.285** | **Cut-off = 1** |
|  | 243 | 252 | PHAKKQDVVV | 1.112 | 2.26 | 1.168 | 1 |
|  | 86 | 95 | QDKRFVCKHS | 1.062 | 2.87 | 1.653 | 2 |
|  | 51 | 60 | KQPATLRKYC | 1.061 | 2.13 | 2.461 | 3 |
|  | 356 | 365 | PIVTEKDSPV | 1.061 | 2.4 | 1.2 | 4 |
|  | 55 | 64 | TLRKYCIEAK | 1.053 | 1.3 | 1.116 | 5 |
| **AAR98805.1** |  |  |  | **Cut-off****= 1.025** | **Cut-off****= 1.272** | **Cut-off = 1** |  |
|  | 243 | 252 | PHAKKQDVVV | 1.112 | 2.26 | 1.16 | 1 |
|  | 86 | 95 | QDKRFVCKHS | 1.062 | 2.87 | 1.643 | 2 |
|  | 51 | 60 | KQPATLRKYC | 1.061 | 2.13 | 2.445 | 3 |
|  | 356 | 365 | PIVTEKDSPV | 1.061 | 2.4 | 1.192 | 4 |
|  | 55 | 64 | TLRKYCIEAK | 1.053 | 1.3 | 1.109 | 5 |
| **AAR98804.1** |  |  |  | **Cut-off****= 1.025** | **Cut-off****= 1.327** | **Cut-off = 1** |  |
|  | 243 | 252 | PHAKKQDVVV | 1.112 | 2.26 | 1.15 | 1 |
|  | 86 | 95 | QDKRVVCKHS | 1.091 | 3.42 | 1.395 | 2 |
|  | 85 | 94 | EQDKRVVCKH | 1.075 | 3.55 | 1.803 | 3 |
|  | 51 | 60 | KHPATLRKYC | 1.07 | 1.74 | 1.904 | 4 |
|  | 356 | 365 | PIVTEKDSPV | 1.061 | 2.4 | 1.181 | 5 |
| **BCG29750.1** |  |  |  | **Cut-off****= 1.026** | **Cut-off****= 1.304** | **Cut-off = 1** |  |
|  | 243 | 252 | PHAKKQDVVV | 1.112 | 2.26 | 1.172 | 1 |
|  | 51 | 60 | KHPATLRKYC | 1.07 | 1.74 | 1.941 | 2 |
|  | 128 | 137 | KVVQPENLEY | 1.066 | 1.79 | 2.144 | 3 |
|  | 129 | 138 | VVQPENLEYT | 1.064 | 1.74 | 1.547 | 4 |
|  | 86 | 95 | QDKRFVCKHS | 1.062 | 2.87 | 1.659 | 5 |
| **BCG29751.1** |  |  |  | **Cut-off****= 1.025** | **Cut-off****= 1.326** | **Cut-off = 1** |  |
|  | 243 | 252 | PHAKKQDVVV | 1.112 | 2.26 | 1.129 | 1 |
|  | 51 | 60 | KHPATLRKYC | 1.07 | 1.74 | 1.869 | 2 |
|  | 128 | 137 | KVVQPENLEY | 1.066 | 1.79 | 2.065 | 3 |
|  | 129 | 138 | VVQPENLEYT | 1.064 | 1.74 | 1.49 | 4 |
|  | 86 | 95 | QDKRFVCKHS | 1.062 | 2.87 | 1.598 | 5 |
| **BCG29752.1** |  |  |  | **Cut-off****= 1.026** | **Cut-off****= 1.297** | **Cut-off = 1** |  |
|  | 243 | 252 | PHAKKQDVVV | 1.112 | 2.26 | 1.187 | 1 |
|  | 51 | 60 | KHPATLRKYC | 1.07 | 1.74 | 1.966 | 2 |
|  | 128 | 137 | KVVQPENLEY | 1.066 | 1.79 | 2.172 | 3 |
|  | 129 | 138 | VVQPENLEYT | 1.064 | 1.74 | 1.567 | 4 |
|  | 86 | 95 | QDKRFVCKHS | 1.062 | 2.87 | 1.681 | 5 |
| **AFN85177.1** |  |  |  | **Cut-off****= 1.025** | **Cut-off****= 1.325** | **Cut-off = 1** |  |
|  | 243 | 252 | PHAKKQDVVV | 1.112 | 2.26 | 1.141 | 1 |
|  | 51 | 60 | KHPATLRKYC | 1.07 | 1.74 | 1.889 | 2 |
|  | 128 | 137 | KVVQPENLEY | 1.066 | 1.79 | 2.087 | 3 |
|  | 129 | 138 | VVQPENLEYT | 1.064 | 1.74 | 1.506 | 4 |
|  | 86 | 95 | QDKRFVCKHS | 1.062 | 2.87 | 1.616 | 5 |
| **AFN85178.1** |  |  |  | **Cut-off****= 1.025** | **Cut-off****= 1.317** | **Cut-off = 1** |  |
|  | 243 | 252 | PHAKKQDVVV | 1.112 | 2.26 | 1.131 | 1 |
|  | 51 | 60 | KHPATLRKYC | 1.07 | 1.74 | 1.873 | 2 |
|  | 128 | 137 | KVVQPENLEY | 1.066 | 1.79 | 2.069 | 3 |
|  | 129 | 138 | VVQPENLEYT | 1.064 | 1.74 | 1.493 | 4 |
|  | 86 | 95 | QDKRFVCKHS | 1.062 | 2.87 | 1.601 | 5 |
| **AOQ25641.1** |  |  |  | **Cut-off****= 1.026** | **Cut-off****= 1.306** | **Cut-off = 1** |  |
|  | 243 | 252 | PHAKKQDVVV | 1.112 | 2.26 | 1.181 | 1 |
|  | 51 | 60 | KHPATLRKYC | 1.07 | 1.74 | 1.955 | 2 |
|  | 128 | 137 | KVVQPENLEY | 1.066 | 1.79 | 2.16 | 3 |
|  | 129 | 138 | VVQPENLEYT | 1.064 | 1.74 | 1.559 | 4 |
|  | 86 | 95 | QDKRFVCKHS | 1.062 | 2.87 | 1.672 | 5 |
|  **AOQ25658.1** |  |  |  | **Cut-off****= 1.025** | **Cut-off****= 1.289** | **Cut-off = 1** |  |
|  | 243 | 252 | PHAKKQDVVV | 1.112 | 2.26 | 1.165 | 1 |
|  | 51 | 60 | KHPATLRKYC | 1.07 | 1.74 | 1.929 | 2 |
|  | 86 | 95 | QDKRFVCKHS | 1.062 | 2.87 | 1.649 | 3 |
|  | 356 | 365 | PIVTEKDSPV | 1.061 | 2.4 | 1.197 | 4 |
|  | 55 | 64 | TLRKYCIEAK | 1.053 | 1.3 | 1.113 | 5 |

**TABLE 3.** Antigenicity, surface accessibility, and hydrophilicity of epitopes of DENV-3 E protein**.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **GenBank Accession No.** | **Position** |  | **Antigenicity** | **Hydrophilicity** | **Surface accessibility** | **Rank according to antigenicity** |
| **QXI72689.1** | **Start** | **End** | **Peptide Sequence** | **Cut-off****= 1.025** | **Cut-off****= 1.378** | **Cut-off = 1** |
|  | 90 | 99 | YVCKHTYVDR | 1.118 | 1.74 | 1.042 | 1 |
|  | 128 | 137 | KVVQHENLKY | 1.078 | 1.58 | 2.091 | 2 |
|  | 129 | 138 | VVQHENLKYT | 1.076 | 1.53 | 1.509 | 3 |
|  | 130 | 139 | VQHENLKYTV | 1.076 | 1.53 | 1.509 | 4 |
|  | 354 | 363 | PVVTKKEEPV | 1.075 | 2.53 | 1.894 | 5 |
| **QXI72690.1** |  |  |  | **Cut-off****= 1.023** | **Cut-off****= 1.405** | **Cut-off = 1** |  |
|  | 90 | 99 | YVCKHTYVDR | 1.118 | 1.74 | 1.042 | 1 |
|  | 128 | 137 | KVVQHENLKY | 1.078 | 1.58 | 2.09 | 2 |
|  | 129 | 138 | VVQHENLKYT | 1.076 | 1.53 | 1.508 | 3 |
|  | 130 | 139 | VQHENLKYTV | 1.076 | 1.53 | 1.508 | 4 |
|  | 131 | 140 | QHENLKYTVV | 1.076 | 1.53 | 1.508 | 5 |
| **AYP74620.1** |  |  |  | **Cut-off****= 1.026** | **Cut-off****= 1.387** | **Cut-off = 1** |  |
|  | 90 | 99 | YVCKHTYVDR | 1.118 | 1.74 | 1.042 | 1 |
|  | 128 | 137 | KVVQHENLKY | 1.078 | 1.58 | 2.09 | 2 |
|  | 129 | 138 | VVQHENLKYT | 1.076 | 1.53 | 1.508 | 3 |
|  | 130 | 139 | VQHENLKYTV | 1.076 | 1.53 | 1.508 | 4 |
|  | 131 | 140 | QHENLKYTVV | 1.076 | 1.53 | 1.508 | 5 |
| **AYP74622.1** |  |  |  | **Cut-off****= 1.026** | **Cut-off****= 1.369** | **Cut-off = 1** |  |
|  | 90 | 99 | YVCKHTYVDR | 1.118 | 1.74 | 1.041 | 1 |
|  | 128 | 137 | KVVQHENLKY | 1.078 | 1.58 | 2.089 | 2 |
|  | 129 | 138 | VVQHENLKYT | 1.076 | 1.53 | 1.507 | 3 |
|  | 130 | 139 | VQHENLKYTV | 1.076 | 1.53 | 1.507 | 4 |
|  | 354 | 363 | PVVTKKEEPV | 1.075 | 2.53 | 1.892 | 5 |
| **AFN85216.1** |  |  |  | **Cut-off****= 1.025** | **Cut-off****= 1.378** | **Cut-off = 1** |  |
|  | 90 | 99 | YVCKHTYVDR | 1.118 | 1.74 | 1.042 | 1 |
|  | 128 | 137 | KVVQHENLKY | 1.078 | 1.58 | 2.091 | 2 |
|  | 129 | 138 | VVQHENLKYT | 1.076 | 1.53 | 1.509 | 3 |
|  | 130 | 139 | VQHENLKYTV | 1.076 | 1.53 | 1.509 | 4 |
|  | 354 | 363 | PVVTKKEEPV | 1.075 | 2.53 | 1.894 | 5 |
| **ASV49464.1** |  |  |  | **Cut-off****= 1.026** | **Cut-off****= 1.372** | **Cut-off = 1** |  |
|  | 90 | 99 | YVCKHTYVDR | 1.118 | 1.74 | 1.07 | 1 |
|  | 128 | 137 | KVVQHENLKY | 1.078 | 1.58 | 2.147 | 2 |
|  | 129 | 138 | VVQHENLKYT | 1.076 | 1.53 | 1.55 | 3 |
|  | 130 | 139 | VQHENLKYTV | 1.076 | 1.53 | 1.55 | 4 |
|  | 354 | 363 | PVVTKKEEPV | 1.075 | 2.53 | 1.945 | 5 |
| **AOQ25535.1** |  |  |  | **Cut-off****= 1.026** | **Cut-off****= 1.366** | **Cut-off = 1** |  |
|  | 90 | 99 | YVCKHTYVDR | 1.118 | 1.74 | 1.054 | 1 |
|  | 128 | 137 | KVVQHENLKY | 1.078 | 1.58 | 2.114 | 2 |
|  | 129 | 138 | VVQHENLKYT | 1.076 | 1.53 | 1.525 | 3 |
|  | 130 | 139 | VQHENLKYTV | 1.076 | 1.53 | 1.525 | 4 |
|  | 354 | 363 | PVVTKKEEPV | 1.075 | 2.53 | 1.914 | 5 |
| **AOQ25562.1** |  |  |  | **Cut-off****= 1.026** | **Cut-off****= 1.364** | **Cut-off = 1** |  |
|  | 90 | 99 | YVCKHTYVDR | 1.118 | 1.74 | 1.045 | 1 |
|  | 354 | 363 | PVVSKKEEPV | 1.085 | 2.66 | 1.763 | 2 |
|  | 128 | 137 | KVVQHENLKY | 1.078 | 1.58 | 2.096 | 3 |
|  | 129 | 138 | VVQHENLKYT | 1.076 | 1.53 | 1.513 | 4 |
|  | 130 | 139 | VQHENLKYTV | 1.076 | 1.53 | 1.513 | 5 |
| **AOQ25777.1** |  |  |  | **Cut-off****= 1.025** | **Cut-off****= 1.385** | **Cut-off = 1** |  |
|  | 90 | 99 | YVCKHTYVDR | 1.118 | 1.74 | 1.039 | 1 |
|  | 128 | 137 | KVVQHENLKY | 1.078 | 1.58 | 2.085 | 2 |
|  | 129 | 138 | VVQHENLKYT | 1.076 | 1.53 | 1.505 | 3 |
|  | 130 | 139 | VQHENLKYTV | 1.076 | 1.53 | 1.505 | 4 |
|  | 354 | 363 | PVVTKKEEPV | 1.075 | 2.53 | 1.889 | 5 |
| **AFN85209.1** |  |  |  | **Cut-off****= 1.026** | **Cut-off****= 1.369** | **Cut-off = 1** |  |
|  | 90 | 99 | YVCKHTYVDR | 1.118 | 1.74 | 1.052 | 1 |
|  | 128 | 137 | KVVQHENLKY | 1.078 | 1.58 | 2.111 | 2 |
|  | 129 | 138 | VVQHENLKYT | 1.076 | 1.53 | 1.524 | 3 |
|  | 130 | 139 | VQHENLKYTV | 1.076 | 1.53 | 1.524 | 4 |
|  | 354 | 363 | PVVTKKEEPV | 1.075 | 2.53 | 1.912 | 5 |

**TABLE 4.** Antigenicity, surface accessibility, and hydrophilicity of epitopes of DENV-4 E protein**.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **GenBank Accession No.** | **Position** |  | **Antigenicity** | **Hydrophilicity** | **Surface accessibility** | **Rank according to antigenicity** |
| **KT750006.1** | **Start** | **End** | **Peptide Sequence** | **Cut-off****= 1.027** | **Cut-off****= 1.404** | **Cut-off = 1** |
|  | 166 | 175 | PRSPSVEVKL | 1.082 | 1.83 | 1.545 | 1 |
|  | 167 | 176 | RSPSVEVKLP | 1.082 | 1.83 | 1.545 | 2 |
|  | 168 | 177 | SPSVEVKLPE | 1.08 | 2.19 | 1.366 | 3 |
|  | 244 | 253 | HAKRQDVTVL | 1.078 | 1.87 | 1.192 | 4 |
|  | 170 | 179 | SVEVKLPEYG | 1.076 | 1.71 | 1.022 | 5 |
| **JN575591.1** |  |  |  | **Cut-off****= 1.027** | **Cut-off****= 1.418** | **Cut-off = 1** |  |
|  | 169 | 178 | PSVEVKLPDY | 1.096 | 1.57 | 1.561 | 1 |
|  | 166 | 175 | PRSPSVEVKL | 1.082 | 1.83 | 1.565 | 2 |
|  | 167 | 176 | RSPSVEVKLP | 1.082 | 1.83 | 1.565 | 3 |
|  | 168 | 177 | SPSVEVKLPD | 1.081 | 2.41 | 1.335 | 4 |
|  | 244 | 253 | HAKRQDVTVL | 1.078 | 1.87 | 1.208 | 5 |
| **U18435.1** |  |  |  | **Cut-off****= 1.029** | **Cut-off****= 1.206** | **Cut-off = 1** |  |
|  | 219 | 228 | PSVEVKLPDY | 1.096 | 1.57 | 1.663 | 1 |
|  | 216 | 225 | PRSPSVEVKL | 1.082 | 1.83 | 1.668 | 2 |
|  | 217 | 226 | RSPSVEVKLP | 1.082 | 1.83 | 1.668 | 3 |
|  | 366 | 375 | QHGTTVVKVK | 1.082 | 2.45 | 1.001 | 4 |
|  | 218 | 227 | SPSVEVKLPD | 1.081 | 2.41 | 1.422 | 5 |
| **KJ946244.1** |  |  |  | **Cut-off****= 1.027** | **Cut-off****= 1.445** | **Cut-off = 1** |  |
|  | 169 | 178 | PSVEVKLPDY | 1.096 | 1.57 | 1.542 | 1 |
|  | 166 | 175 | PRSPSVEVKL | 1.082 | 1.83 | 1.547 | 2 |
|  | 167 | 176 | RSPSVEVKLP | 1.082 | 1.83 | 1.547 | 3 |
|  | 168 | 177 | SPSVEVKLPD | 1.081 | 2.41 | 1.319 | 4 |
|  | 244 | 253 | HAKRQDVTVL | 1.078 | 1.87 | 1.193 | 5 |
| **EU448458.1** |  |  |  | **Cut-off****= 1.027** | **Cut-off****= 1.408** | **Cut-off = 1** |  |
|  | 169 | 178 | PSVEVKLPDY | 1.096 | 1.57 | 1.541 | 1 |
|  | 166 | 175 | PRSPSVEVKL | 1.082 | 1.83 | 1.546 | 2 |
|  | 167 | 176 | RSPSVEVKLP | 1.082 | 1.83 | 1.546 | 3 |
|  | 168 | 177 | SPSVEVKLPD | 1.081 | 2.41 | 1.318 | 4 |
|  | 244 | 253 | HAKRQDVTVL | 1.078 | 1.87 | 1.193 | 5 |
| **MG895393.1** |  |  |  | **Cut-off****= 1.026** | **Cut-off****= 1.426** | **Cut-off = 1** |  |
|  | 169 | 178 | PSVEVKLPDY | 1.096 | 1.57 | 1.534 | 1 |
|  | 166 | 175 | PRSPSVEVKL | 1.082 | 1.83 | 1.539 | 2 |
|  | 167 | 176 | RSPSVEVKLP | 1.082 | 1.83 | 1.539 | 3 |
|  | 168 | 177 | SPSVEVKLPD | 1.081 | 2.41 | 1.312 | 4 |
|  | 244 | 253 | HAKRQDVTVL | 1.078 | 1.87 | 1.187 | 5 |
| **BCG29769.1** |  |  |  | **Cut-off****= 1.028** | **Cut-off****= 1.361** | **Cut-off = 1** |  |
|  | 169 | 178 | PSVEVKLPDY | 1.096 | 1.57 | 1.568 | 1 |
|  | 167 | 176 | RSPSVEVKLP | 1.082 | 1.83 | 1.573 | 2 |
|  | 166 | 175 | PRSPSVEVKL | 1.082 | 1.83 | 1.573 | 3 |
|  | 168 | 177 | SPSVEVKLPD | 1.081 | 2.41 | 1.341 | 4 |
|  | 244 | 253 | HAKRQDVTVL | 1.078 | 1.87 | 1.214 | 5 |
| **ACC68759.1** |  |  |  | **Cut-off****= 1.027** | **Cut-off****= 1.408** | **Cut-off = 1** |  |
|  | 169 | 178 | PSVEVKLPDY | 1.096 | 1.57 | 1.541 | 1 |
|  | 166 | 175 | PRSPSVEVKL | 1.082 | 1.83 | 1.546 | 2 |
|  | 167 | 176 | RSPSVEVKLP | 1.082 | 1.83 | 1.546 | 3 |
|  | 168 | 177 | SPSVEVKLPD | 1.081 | 2.41 | 1.318 | 4 |
|  | 244 | 253 | HAKRQDVTVL | 1.078 | 1.87 | 1.193 | 5 |
| **AOQ25530.1** |  |  |  | **Cut-off****= 1.027** | **Cut-off****= 1.404** | **Cut-off = 1** |  |
|  | 166 | 175 | PRSPSVEVKL | 1.082 | 1.83 | 1.545 | 1 |
|  | 167 | 176 | RSPSVEVKLP | 1.082 | 1.83 | 1.545 | 2 |
|  | 168 | 177 | SPSVEVKLPE | 1.08 | 2.19 | 1.366 | 3 |
|  | 244 | 253 | HAKRQDVTVL | 1.078 | 1.87 | 1.192 | 4 |
|  | 170 | 179 | SVEVKLPEYG | 1.076 | 1.71 | 1.022 | 5 |
| **ANC57623.1** |  |  |  | **Cut-off****= 1.027** | **Cut-off****= 1.428** | **Cut-off = 1** |  |
|  | 169 | 178 | PSVEVKLPDY | 1.096 | 1.57 | 1.511 | 1 |
|  | 166 | 175 | PRSPSVEVKL | 1.082 | 1.83 | 1.516 | 2 |
|  | 167 | 176 | RSPSVEVKLP | 1.082 | 1.83 | 1.516 | 3 |
|  | 168 | 177 | SPSVEVKLPD | 1.081 | 2.41 | 1.292 | 4 |
|  | 244 | 253 | HAKRQDVTVL | 1.078 | 1.87 | 1.169 | 5 |