**TABLE S6. PRODUCTS OF THE 27 GENES THAT ARE IMPORTANT FOR EARLY EMBRYOGENESIS CARRY CONSENSUS PHOSPHORYLATION SITES OF CONSERVED KINASES THAT ARE KNOWN TO BE ACTIVE OR REGULATED UPON EGG ACTIVATION.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Kinase** | **Protein** | **Scoring percentile** | **Sequence motif** |
| **Cdc2 (Drosophila Cdk1)** | Acn | 0.002% | RSRGSRTTPRKRTES |
| 0.045% | ERAGSGASPVRRSRG |
| Ana1 | 0.025% | PTKSPPRSPRKCVER |
| 0.047% | APPSPTKSPPRSPRK |
| 0.086% | CSSTTASSPERRPRK |
| Ball | 0.167% | VKTEPKSTPRERATP |
| 0.176% | NGHGDSSTPGRSPRT |
| BRWD3 | 0.042% | GRGGSSSSPNKRVKK |
| Dlig-I | 0.167% | SDATDSPSPPKKVPK |
| Mcm3 | 0.070% | GEASSQRSPSRRSKR |
| MCPH1 | 0.052% | SELMDISSPRRRSVA |
| Mod | 0.039% | EETVVPQSPSKKSRK |
| Pk92b | 0.067% | PTTTTPGTPGIKTKI |
| Spc105r | 0.145% | DQEEMCKTPIHKRVL |
| Sle | 0.058% | EKKRFPKTPGREKVP |
| **MAPK1 (Drosophila Erk)** | Ana1 | 0.036% | KRSAKASVELRTTNT |
| 0.066% | EKQRLVEVTLTSNSD |
| Aub | 0.070% | KRAVMGMVILTDYNN |
| Ball | 0.184% | RKKTAKKVTPSARNA |
| BRWD3 | 0.000% | RRRNGVAVSASSSGS |
| 0.089% | PRLCCLKLAIIDEEG |
| Mbs | 0.002% | RRISSGPIALNASNQ |
| 0.079% | ARPTDLPLIPAPAAP |
| 0.190% | ARDSLLSLYARRTTD |
| 0.064% | KRRSTGVVHIDMDEL |
| Mcm3 | 0.058% | RRETRRSLPARSVAM |
| 0.185% | RKNPQRALGLLSNAA |
| MCPH1 | 0.124% | RKLRGMRLDPTVTQH |
| 0.014% | RRAEDDRVYLDPYWV |
| 0.190% | RRSSLLGIAKQAEET |
| Mod | 0.148% | PKVKVGKIPLGTPKN |
| Mod(mdg4) | 0.158% | CRGDLVDVSLAAEGQ |
| Pk92b | 0.032% | PRKVRPALPINTEFG |
| 0.054% | IRKSDLEVLIRGLRD |
| 0.120% | KRAVQAAVTIFSPEL |
| Spc105r | 0.079% | REHVDLSVNLQASVD |
| Spindly | 0.005% | RKGTPVRIPVIKDST |
| 0.052% | KRNLDTALAAESYLT |
| TER94 | 0.002% | RRKETVCIVLSDDTC |
| 0.070% | RRIVSQLLTLMDGMK |
| 0.110% | KKSSHLIVMAATNRP |
| **GSK3A (Drosophila GSK3)** | Ball | 0.191% | ASPKPRSTPKASPKP |
| Mbs | 0.146% | RTQAPLSSRRRSLSS |
| 0.079% | QPPPPPTTPPPAVIP |
| Pzg | 0.180% | QKDSPNTTAPVSVSI |
| Sle | 0.109% | EVKQEKPSPSPSPVP |
| 0.119% | EKPSPSPSPVPKEGK |
| 0.149% | RKPSVSPSPGRTLTP |
| Spag | 0.066% | RKESPSSSAASSPTE |
| **CaMKIIγ (Drosophila CaMKII)** | CG8223 | 0.112% | ATALRQSSVLIEEEI |
| Pzg | 0.063% | YETCKQQTFQCKTCR |
| TER94 | 0.121% | LQLFRGDTVILKGKR |
| Spag | 0.071% | LCYLKQESFDQCVED |
| Spc105r | 0.078% | QQIKRRISFSGKKSV |
| 0.103% | PSAKTQQSIAMSESM |
| 0.118% | KSIVSQKTIDKSTEQ |