|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **Reversal Distance** | | | |
|  |  |  | **Initial tap** |  | **habituation asymptote** |  |
| **Human Protein** | ***C. elegans* gene** | **allele** | **p-value** | **score** | **p-value** | **score** |
| PRKD1 | *dkf-2* | ok1704 | NS |  | < 0.01 | - - |
| ARF6 | *arf-1.2* | ok796 | < 0.001 | - - - | < 0.001 | - - - |
| PRKCG | *pkc-2* | ok328 | < 0.01 | + + | NS |  |
| PDK4 | *pdhk-2* | tm3075 | 0.05 | - | NS |  |
| PRKAR1B | *kin-2* | ce179 | < 0.001 | - - - | NS |  |
| CHRFAM7A | *acr-16* | ok789 | < 0.001 | + + + | NS |  |
| MYO1F | *hum-1* | ok634 | NS |  | NS |  |
| PRKCH | *pkc-1* | ok563 | NS |  | NS |  |
| CHD3 | *chd-3* | ok1651 | < 0.001 | - - - | < 0.001 | - - - |
| RAPGEF3 | *epac-1* | ok655 | NS |  | NS |  |
| STX6 | *syx-6* | tm4733 | < 0.001 | - - - | NS |  |
| ADRBK2 | *grk-2* | rt97 | < 0.01 | + + | NS |  |
| PLXNA3 | *plx-2* | ev773 | < 0.01 | - - | NS |  |
| RAB30 | *rab-30* | tm2653 | NS |  | NS |  |
| CNGA2 | *tax-4* | p678 | < 0.001 | - - - | NS |  |
| PDE7A | *pde-4* | ce268 | < 0.001 | - - - | NS |  |
| HDAC4 | *hda-4* | ok518 | NS |  | < 0.05 | + |
| HUNK | *par-1* | ok2001 | < 0.001 | + + + | NS |  |
| SYT6 | *snt-1* | ad596 | < 0.001 | + + + | < 0.001 | + + + |
| CHP2 | *ncs-1* | qa406 | NS |  | NS |  |
| SPAG9 | *unc-16* | e109 | < 0.001 | - - - | < 0.001 | - - - |
| OGT | *ogt-1* | ok430 | < 0.001 | + + + | <0.001 | + + + |

**Table 1.** Summary of mechanosensory and learning phenotypes for predicted CMK-1 phosphorylation targets.