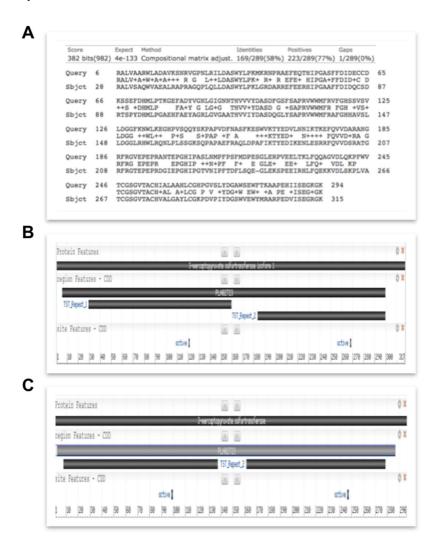
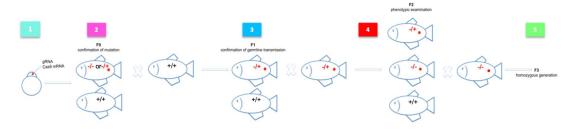




## **Supplementary Materials:**



**Figure S1:** Human 3-MST and *zgc162544* protein homology. **(A)** Comparison at protein sequence level, according to NCBI database. **(B)** Human protein domains and **(C)** *zgc162544* protein domains, according to NCBI database. Gene IDs: 4357 (3-MST) and 796035 (*zgc162544*).



**Figure S2:** Schematic summarizing the method of generation and identification of mutant carrier founder zebrafish using the CRISPR/Cas system. **(1)** gRNAs and Cas9 mRNA injection into embryos (F0 generation), **(2)** cross of an F0 mutant (+/-or -/-) with a wild type (+/+) (F2 generation), **(3)** confirmation of germline transmission in F1 zebrafish generation, **(4)** mating of F1 -/+ founders with same type of mutation to identify -/- mutants (F2 generation) and **(5)** in cross of -/- founders to produce the F3 homozygous (and maternal zygotic mutants) for the phenotype characterization.