**Figure S1.** Nucleotide diversity (A) and Tajima's D (B) in the 2kb region around *FBti0019386* insertion. The arrow indicates the location of the TE. Box plot representation of nucleotide diversity (C) and Tajima's D (D) estimated for 1,000 random 1kb regions.



**Figure S2: Flies with FBti0019386 are more sensitive to osmotic and starvation stress.**(A) Females from outbred populations with the *FBti0019386* insertion (red) showed more mortality than females without FBti0019386 insertion (gray). (B) Males with the *FBti0019386* insertion died more than males without the insertion. Survival under control conditions is represented as dashed lines.



**Figure S3**.Graphical representation of the Principal Component Analyses (PCA). (A) Grouping of the climatic variables (blue) in the PCA with latitude and TE frequency projected on the PCA. Variable are as follows: 1 AvMonTemp, 2 thermalAmp, 3 HotMonth, 4 ColdMonth, 5 summerSEASON, 6 winterSEASON, 7 monthabove10, 8 MAP, 9 Cv, 10 DryMonth, 11 summer\_P,12 summer\_DryM, 13 summer\_wetM, 14 winter\_P, 15 winter\_DryM, 16 winter\_wetM. (B) Correlation analyses between TE frequency and the first component of the PCA for the three continents.

