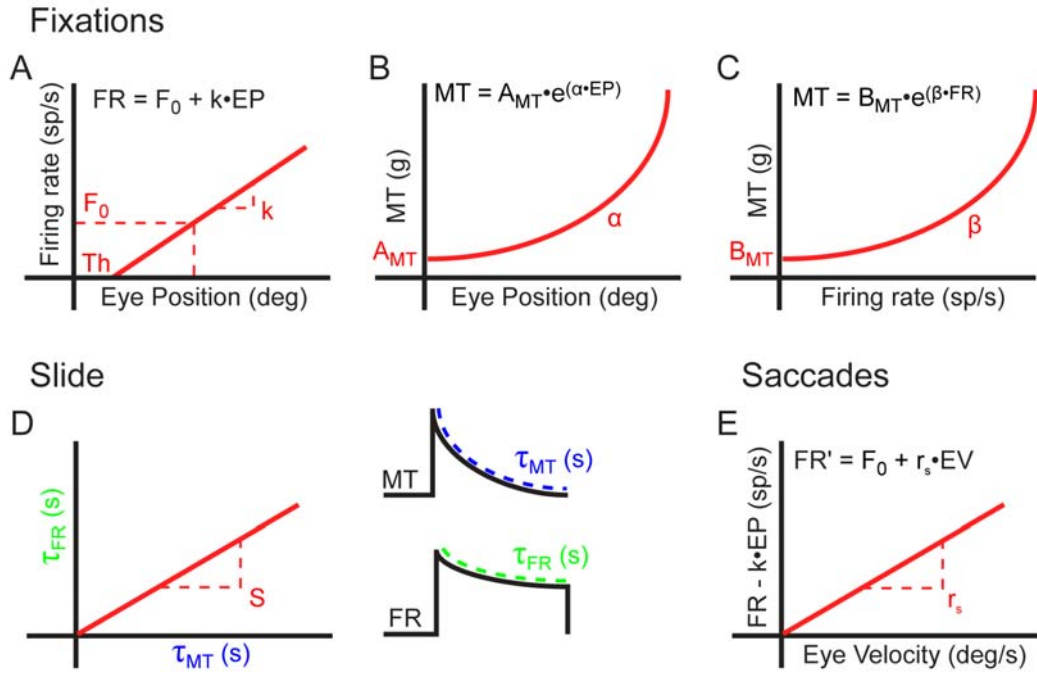


Supplementary figure 1 and legend



Supplementary figure legend 1. Study parameters. During eye fixations: (A).

The linear relationship between firing rate (FR) and eye position (EP) that yields the neuronal eye position sensitivity (k), an abscissa intercept (Th) and an ordinate intercept (F_0 , the firing at straight ahead gaze). (B) The exponential relationship between muscle tension (MT) and eye position yielded the parameters α and A_{MT} . A_{MT} was the ordinate intercept in the tension to position plot. (C) The exponential relationship between muscle tension and firing rate yielded the parameter β and also B_{MT} as the ordinate intercept. (D) During postsaccadic slides, the linear relationship between the time constants of the tension (τ_{MT}) and the firing rate (τ_{FR}) yielded a line characteristic for each neuron whose slope is the neuronal slide sensitivity (S). The inset shows that time constants were obtained by fitting exponentials to muscle tension and firing rate during postsaccadic slides. (E) During saccades, the linear relationship between firing rate and eye velocity (EV) yields the neuronal eye velocity sensitivity (r_s). Similarly, sensitivity to tension during saccades (r_t) can be obtained as the slope of the relationship between firing rate and the first derivative of muscle force.