Supporting Information

DNAS

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Fig. S1. The majority of mouse trigeminal ganglia (TG) and dorsal root ganglia (DRG) neurons have small-diameter soma size. Data are presented as mean \pm SEM from >1,500 cells from >14 sections for each tissue.



Fig. S2. Control RNA in situ hybridization using Piezo2 sense probe. (Scale bar, 100 μ m.)



Fig. S3. Control RNA in situ hybridization using TRPV1 and TRPM8 sense probes in duck TG and DRG. (Scale bar, 100 μm.)



Fig. S4. Sensory ganglia have similar total number of neurons in tactile and visually foraging birds. Sectioning of bird TG and DRG was performed in random planes to minimize the effect of geometrical differences between the ganglia. Data shown as mean ± SD from 8 to 33 independent tissue sections.



Fig. S5. Correlation analysis between peak mechano-activated ionic current (MA current) amplitude and inactivation rate in TG neurons. (*A* and *B*) Current amplitude (I) and inactivation rate constant (τ) were obtained by voltage-clamp recordings of MA current evoked by 6 μ m mechanical stimulation (800 μ m/s) in the whole-cell mode. (*C*) Results of correlation computation between current amplitude or inactivation rate constant and neuron soma size, performed using the nonparametric Spearman correlation analysis. We detected a negative correlation between neuron size and τ in duck TG neurons only (*P* = 0.004).



Fig. S6. Three hypothetical scenarios of slope/threshold combination that can lead to increased mechano-responses of duck TG neurons. Red and blue arrowheads point at activation thresholds of duck and mouse TG neurons, respectively.