



Fig. S2

Permeability of BZA and DZA in taste receptor cells. (a) Carbonated water decreases intracellular pH (pHi) in TRCs. pHi changes were monitored as described in Methods in the presence of the carbonic anhydrase inhibitors BZA (100 μ M, blue trace), or DZA (0.5%, red trace); the black trace denotes control conditions in the absence of inhibitors. The pH stimulus (carbonated water) was applied during the period indicated by the gray box. A significant decrease in pHi due to the catalytic action of carbonic anhydrases was observed for control buffer or BZA, but not for DZA. (b) Averaged pHi changes from 9 TRCs; the values are mean \pm sem.