

Olfactory transduction in ciliated receptor neurons of the Cabinza grunt, *Isacia conceptionis* (teleostei: haemulidae)

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The ciliated receptor neurons of fish olfactory organs are thought to transduce amino acids through a cAMP-dependent transduction pathway, but direct physiological evidence for this hypothesis remains scarce and is confined to catfish and trout. We investigated olfactory transduction in a marine fish, the Cabinza grunt *Isacia conceptionis* (Perciformes, Teleostei). The olfactory epithelium was characterized using light and electron microscopy, and isolated ciliated receptor neurons were recorded with the perforated patch-clamp technique. Cells were stimulated with puffer pipettes containing amino acid odourants, IBMX plus forskolin or 8bromo-cAMP. All three stimuli triggered transient inward currents at a holding potential of -70 mV and responses with outward-rectifying current-voltage relationships. The characteristics of the transduction currents induced by each stimulus were similar across cells and indistinguishable within the same cell, supporting the hypothesis of a cAMP pathway m