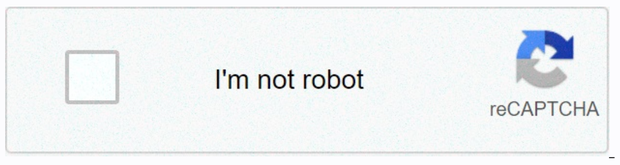

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[Google Scholar]67. Offermanns S, Simon MI. Gα15 and Gα16 a wide range of phospholipase receptors C. J Biol Chem. 1995;270: 15175–15180. 10.1074/jbc.270.25.15175 [PubMed] [CrossRef] [Google Scholar]Page 2MIP receiver signage promotes short-term taste plasticity. (A) Overview of the taste plasticity trial: Short-term conditioning with NaCl in the absence of food induces aversive learning, known as taste plasticity [11.12]. Young synchronized adults C. elegans are washed in buffer in the absence of salt foods (NaCl condition) or without NaCl (simulation condition). The behavior of chemotaxis in NaCl is tested on a quadrant plate. After ten minutes, it is calculated as indicated by a chimotaxi index (CI). (B-C) Taste plasticity of sprr mutants. Individual CIs are drawn as blue dots. Box diagrams indicate 25th (lower bound), 50th (line) and 75th percentiles (upper limit). Whiskers show the minimum and maximum. Outliers are indicated as black spots. (B) Comparison of CIs for poorly conditioned animals produced p>0.05 for all (not indicated in the chart). NaCl-conditioned mutants of sprr-1 and sprr-3 showed wild type avoidance of NaCl, while the sprr-2 response was significantly reduced. The data was analyzed using a one-way test ANOVA and post-hoc Tukey (n ≥ 4). (C) The sprr-2 MIP receptor gene is necessary for taste plasticity. The expression of sprr-2 cDNA under the control of its promoting sequence [sprr-2p::sprr-2] rescues the plasticity defect of sprr-2 mutant animals conditioned by NaCl. Statistical comparisons using ANOVA and Tukey one-way test post-hoc (n ≥ 12). *p<0.05; modifies < 2011]. n.s., not significant. See also Figs S1 and S2. Figs.