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The Bile Acid Receptor TGR5 Activates the TRPA1 Channel to Induce Itch in Mice**Short Title:** Bile Acid Evoked Itch

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Abbreviations: AITC, allyl isothiocyanate; BA, bile acid; DiI, Diiododecyl-3,3',3'-Tetramethylindocarbocyanine Perchlorate; DCA, deoxycholic acid; DRG, dorsal root ganglia; GRP, gastrin-releasing peptide; IR, immunoreactivity; NPPB, natriuretic polypeptide B; TLCA, tauroolithocholic acid; TRPA1, transient receptor potential ankyrin 1.

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Author contributions: TL, GJ, PZ, DPP, DJ, MG, RB, YMW, MK, SH, RN, SM: generation of data; PM, CK, MSS, PG, CUC, NWB: conception of study; NWB, MSS: writing manuscript.

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