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(54) Title: SAVORY TASTE ENHANCEMENT VIA TRANSMEMBRANE REGION BINDING

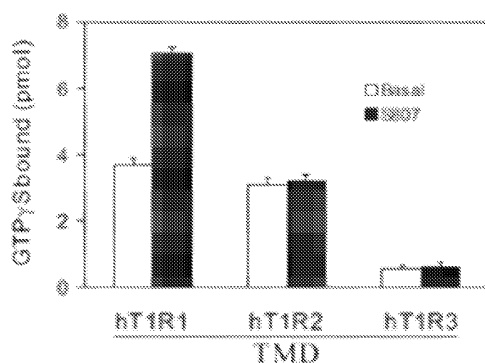


FIG. 1

(57) Abstract: The present disclosure generally provides methods for imparting or enhancing an umami taste of a flavored article by introducing a compound that modulates a transmembrane (TM) region of a T1R taste receptor, such as the TM region of a T1R1 taste receptor. In some other aspects, the disclosure provides methods of identifying compounds that modulate a transmembrane (TM) region of a T1R taste receptor, and which thereby imparts or enhances an umami taste in a flavored article. In some other aspects, the disclosure provides compounds that modulate a transmembrane (TM) region of a T1R taste receptor, and their use in food or beverage products, in some cases, in combination with other compounds known to impart or enhance umami taste, such as glutamates, aspartates, and purinic ribonucleotides, such as inosine monophosphate (IMP) and guanosine monophosphate (GMP). In some aspects, the inclusion of such TM-region modulators in flavored products may allow one to reduce or eliminate the concentration of glutamate and aspartate in certain food and beverage products.