

Taste Receptor Type 1 Member 3 (TAS1R3) Active Protein | TAS1R3 active protein

Active Taste Receptor Type 1 Member 3 (TAS1R3)

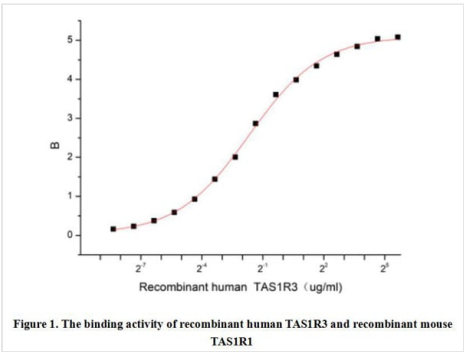
CATALOG # AAA161923	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Taste Receptor Type 1 Member 3 (TAS1R3); Active Taste Receptor Type 1 Member 3 (TAS1R3); Taste Receptor Type 1 Member 3; T1R3; Sweet taste receptor T1R34; TAS1R3 active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 95% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Ala21~Leu570
Applicable Applications for TAS1R3 active protein	Activity Assay, Cell Culture
Species	Human
Expression System	Prokaryotic expression
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	7
Research Area	CD & Adhesion molecule
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months

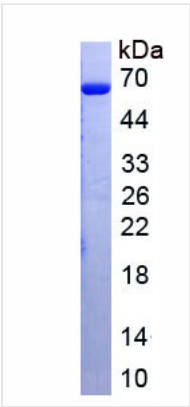


Bioactivity

Taste receptor type 1 member 3 (TAS1R3), responsible for mediating taste perception, is a G protein-coupled receptor (GPCR) expressed in gustatory cells located within the taste buds on the tongue. It can form a heterodimeric receptor with TAS1R1 to elicit the umami taste response, or it can bind with TAS1R2 to form a receptor for the sweet taste response, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human TAS1R3 and recombinant mouse TAS1R1. Briefly, biotin-linked TAS1R3 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to TAS1R1-coated microtiter wells and incubated for 1h at 37 degree C. Wells were washed with PBST 3 times and incubation with Streptavidin-HRP for 30min, then wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50 ul stop solution to the wells and read at 450 nm immediately. The binding activity of recombinant human TAS1R3 and recombinant mouse TAS1R1 was shown in Figure 1, the EC50 for this effect is 0.31 ug/mL.

SDS-PAGE

Figure. SDS-PAGE



ADDITIONAL INFORMATION

Product Categories/Family for TAS1R3 active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GI #	91206396
NCBI GeneID	83756
NCBI Accession #	NP_689414.1
NCBI GenBank Nucleotide #	NM_152228.1
UniProt Accession #	Q7RTX0; Q5TA49; Q8NGW9
Molecular Weight	93,386 Da
NCBI Official Full Name	taste receptor type 1 member 3
NCBI Official Synonym Full Names	taste receptor, type 1, member 3
NCBI Official Symbol	TAS1R3
NCBI Official Synonym Symbols	T1R3
NCBI Protein Information	taste receptor type 1 member 3; sweet taste receptor T1R3
UniProt Protein Name	Taste receptor type 1 member 3
UniProt Gene Name	TAS1R3
UniProt Synonym Gene Names	T1R3; TR3
UniProt Entry Name	TS1R3_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-active-protein/taste-receptor-type-1-member-3-tas1r3/161923>