

Recombinant Rat Trace-amine-associated Receptor 1, His-tagged

Cat. No. Taar1-1285R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Rat Receptor Associated Protein produced in <i>E. Coli</i> is a single, non-glycosylated polypeptide chain having a molecular mass of 38,862 Dalton. The Recombinant RAP Rat contains 6xHis tag and 1xC-myc, RAP Rat is purified by proprietary chromatographic techniques.
Species	Rat
Source	E.coli
Description	Receptor-associated Protein (aka RAP) averts the GCM-mediated enhancement of axon growth- ApoE-containing lipoproteins which are known to bind to receptors of the LDLr superfamily. In the presence of RAP, GCM doesn't increase the axon extension rate in relation to base medium. Furthermore, the addition of RAP to the base medium doesn't change the rate of axon extension. This implies that the growth stimulatory effect of apoE-containing lipoproteins secreted by glial cells is mediated by the LDLr family receptors. RAP annuls the growth stimulatory effect of GCM.
Special Note	Ligand binding to RAP is Ca ²⁺ dependent and e.g. lipid receptors can be released from RAP by a buffer containing 10mM EDTA. Furthermore, buffers containing phosphate should be avoided (it would form precipitates with Ca ²⁺).
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation	The protein (1mg/ml) was lyophilized after from a sterile solution containing TBS pH-

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7.5, 0.1% BSA and 0.09% NaN₃.

Solubility

It is recommended to reconstitute the lyophilized RAP Rat in sterile 18MΩ-cm H₂O not less than 100g/ml, which can then be further diluted to other aqueous solutions.

Purity

Greater than 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

Stability

Lyophilized RAP Rat although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution RAP Rat should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

GENE INFORMATION

Gene Name

Taar1 trace-amine-associated receptor 1 [*Rattus norvegicus*]

Synonyms

Taar1; trace-amine-associated receptor 1; Tar1; Trar1; trace amine associated receptor 1; trace amine receptor 1

Gene ID

113914

mRNA Refseq

NM_134328

Protein Refseq

NP_599155

UniProt ID

Q923Y9

Pathway

Neuroactive ligand-receptor interaction

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Function

G-protein coupled amine receptor activity; receptor activity; trace-amine receptor activity

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