PRODUCT INFORMATION



F4CPG

Item No. 36667

CAS Registry No.:	170846-89-6	NH ₂ O
Formal Name:	α-amino-4-carboxy-α-ethyl-	
	benzeneacetic acid	ОН
Synonym:	(R,S)-α-Ethyl-4-carboxyphenylglycine	
MF:	C ₁₁ H ₁₃ NO ₄	
FW:	223.2	
Purity:	≥98%	
UV/Vis.:	λ _{max} : 233 nm	\checkmark
Supplied as:	A solid	
Storage:	-20°C	OCOH
Stability:	≥4 years	

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

E4CPG is supplied as a solid. Aqueous solutions of E4CPG can be prepared by directly dissolving the solid in aqueous buffers. The solubility of E4CPG in PBS (pH 7.2) is approximately 0.1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

E4CPG is an antagonist of metabotropic glutamate receptor 1 (mGluR1) and mGluR2.¹ It is selective for mGluR1 and mGluR2 over mGluR6 at 1 mM. E4CPG (1 mM) inhibits L-glutamate-induced increases in inositol phosphate (InsP) levels in CHO cells expressing mGluR1 and prevents forskolin-induced decreases in cAMP levels in CHO cells expressing mGluR2. In vivo, intraplantar administration of E4CPG (1-10 nmol/paw) reduces glutamate-induced paw licking in a mouse model of nociceptive pain.²

References

- 1. Sekiyama, N., Hayashi, Y., Nakanishi, S., et al. Structure-activity relationships of new agonists and antagonists of different metabotropic glutamate receptor subtypes. Br. J. Pharmacol. 117(7), 1493-1503 (1996).
- 2. Beirith, A., Santos, A.R.S., and Calixto, J.B. Mechanisms underlying the nociception and paw oedema caused by injection of glutamate into the mouse paw. Brain Res. 924(2), 219-228 (2002).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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