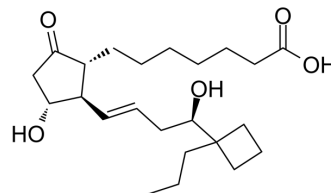


Butaprost free acid

Cat. No.:	HY-120973
CAS No.:	215168-33-5
Molecular Formula:	C ₂₃ H ₃₈ O ₅
Molecular Weight:	394.54
Target:	Biochemical Assay Reagents
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

(R)-Butaprost (free acid). Butaprost is a structural analog of prostaglandin E2 (PGE2) with good selectivity for the EP2 receptor subtype. Butaprost is frequently used pharmacologically to define the expression profile of EP receptors in various human and animal tissues and cells. Gardiner caused serious confusion about the structure of butaprost in 1986 when he reported that the epimer of butaprost showing this selective activity was the C-16 (R)-epimer (See reference 2 and notes). To increase the binding affinity of (R)-butaprost to prostaglandin receptors, we removed the methyl ester of (R)-butaprost and recreated the native C-1 carboxylic acid. Prostaglandin free acids typically bind their cognate receptors with 10 to 100-fold higher affinity than the corresponding ester derivatives. The pharmacology of (R)-butaprost has not been carefully studied, but it is generally considered to be the less active C-16 epimer. (Note: In the 1986 Gardiner paper in the British Journal of Pharmacology, butaprost appears on page 46 under the designation TR 4979. The structure drawn is incorrect because the authors use and refer to the more active C - The 16 epimer, which is actually 16(S). The structure on page 46 shows the structure as 16(R). It was not until the late 1990s that careful studies in the United States and Japan correctly determined the actual structure of C-16 The type is 16(S) in a compound called butaprost.)

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA