

Identification

(1S, 4R)-(+)-4-Acetoxy-2-cyclopenten-1-ol
CAS# 60410-16-4

(1R, 4S)-(-)-4-Acetoxy-2-cyclopenten-1-ol
CAS# 60176-77-4

Specifications

Chemical purity > 99 % (GC a/a)

Enantiomeric excess
(optical purity) > 99 %

Properties

Solid, melting point 48-49°C

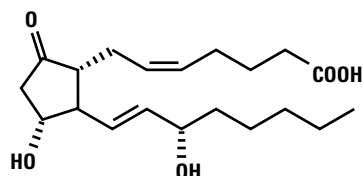
Safety & Handling

Substance not fully tested
Store at room temperature

References

1. Laumen K et al., Tetrahedron Lett. 25 (51), pp 5875-78 (1984)
2. Theil F et al., Tetrahedron 47 (36), pp 7569-82 (1991)
3. Curran TT et al., Tetrahedron 53 (6), pp 1983-2004 (1997)
4. Wisdom R (Archimica GmbH), EP 1428888

Key Building Blocks for Prostaglandins Enantiopure cis-4-Acetoxy-2-cyclopentenols



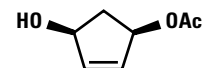
Prostaglandin E2

Archimica Now Offers Key Intermediates for the Efficient and Straightforward Synthesis of Prostaglandins

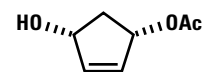
- Enantiopure cis-4-Acetoxy-2-cyclopenten-1-ols already scaled to > 100 kg
- Economic, safe and scalable enzymatic process with attractive overall yields
- Both enantiomers available
- Samples available on request

cis-4-Acetoxy-2-cyclopenten-1-ol Building Blocks Available from Archimica

(1S, 4R)-(+)-4-Acetoxy-2-cyclopenten-1-ol
CAS# 60410-16-4



(1R, 4S)-(-)-4-Acetoxy-2-cyclopenten-1-ol
CAS# 60176-77-4



For the first time, enantiopure 1,4-cis-cyclopentenediol monoesters can be readily produced up to the large scale by Archimica. The synthesis of these long sought-after compounds has generated considerable attention over the last decades, as they offer completely new synthetic opportunities in pharmaceutical fine chemicals synthesis. However, the synthetic methods developed to date suffer from severe disadvantages, especially from safety and economic standpoints.

They have now become available after the first development of a stereo- and chemo-selective catalytic Luche reduction of hydroxycyclopentenone, accessible by the acid-catalysed rearrangement of furfuryl alcohol, and followed by the enzymatic formation of the title compounds. We expect that the ready availability of these compounds will enable the pharmaceutical industry to develop new synthetic pathways to several highly interesting compound classes, e. g. prostaglandins, carbocyclic nucleosides and other biologically active products.

For additional information and/or samples, please contact our regional sales office.
Regional contacts are given at www.archimica.com



Archimica's recommendations, notices or instructions as to handling, use, storage or disposal of any Product, including its use alone or in combination with other products, or as to any apparatus or process for the use of any Product, and based upon information believed to be reliable, but Archimica shall have no liability with respect to any such recommendations or instructions. Archimica's sole and exclusive warranty is that its products comply with Archimica's published chemical and physical specifications. Archimica makes no other warranties, either express or implied, with respect to its recommendations, instructions, products, apparatus, process or otherwise, and specifically disclaims any implied warranties of merchantability, suitability, fitness for a particular purpose or otherwise. July 2008