

### 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

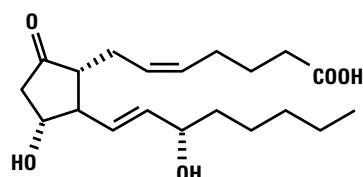
### Safety & Handling

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



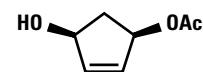
Prostaglandin E2

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

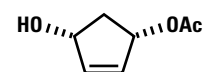
- Enantiopure cis-4-Acetoxy-2-cyclopenten-1-ols already scaled to > 100 kg
- Economic, safe and scalable enzymatic process with attractive overall yields
- Both enantiomers available
- Samples available on request

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

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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](http://www.archimica.com)



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