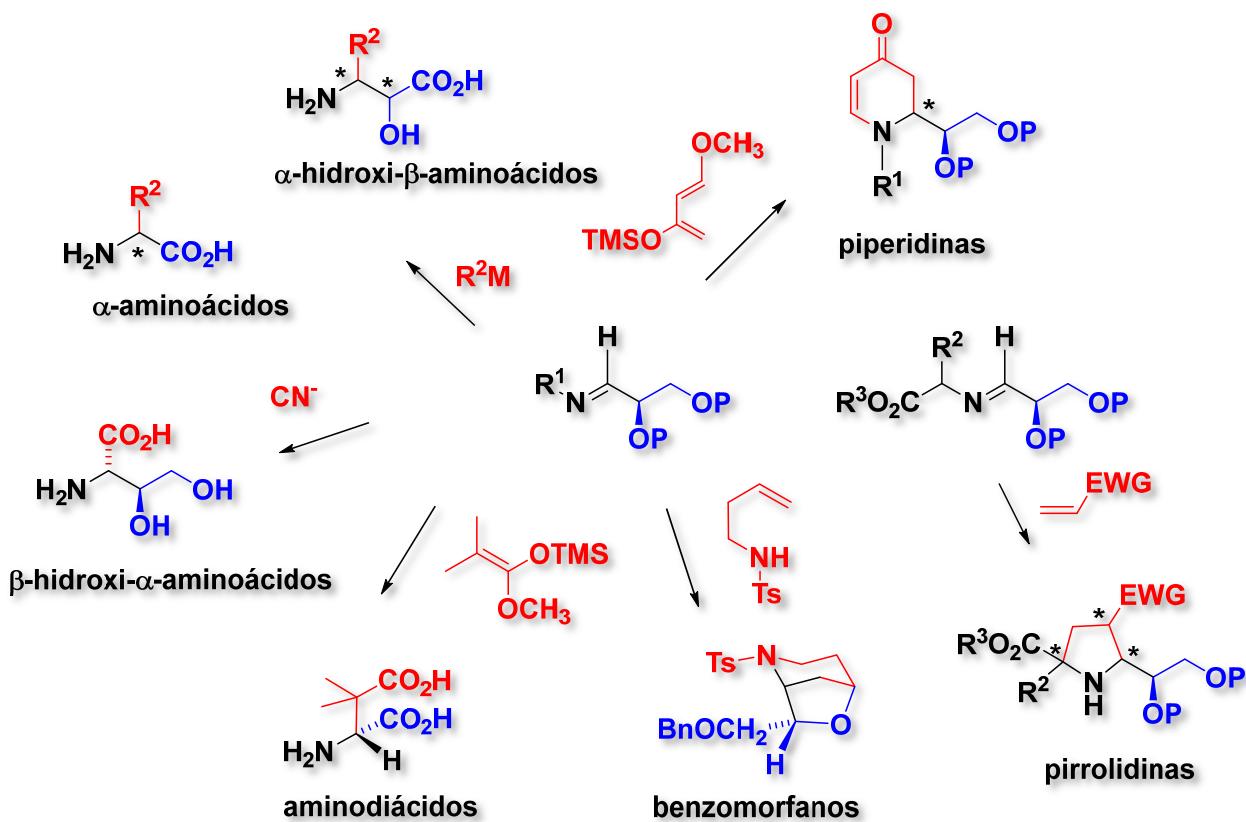


# Iminas Devivadas de D-Gliceraldehído como Sintones Quirales



**Autores:** J. A. Gálvez, R. Badorrey, A. Mahía, M. D. Díaz-de-Villegas

**Título:** Asymmetric synthesis of (1*R*,5*S*)-2-methyl-6,7-benzomorphan via Aza-Prins reaction

**Revista:** Chirality 33, 543-548, 2021

**DOI:** 10.1002/chir.23338

**Autores:** A. Castán, R. Badorrey, J. A. Díez, C. T. Chistoffersen, L. K. Rasmussen, J. Kehler, R. Köhler, J. A. Gálvez, M. D. Díaz-de-Villegas

**Título:** Debenzylative cycloetherification as a synthetic tool in the diastereoselective synthesis of 3,6-disubstituted hexahydro-2*H*-furo[3,2-*b*]pyrroles, PDE1 enzyme inhibitors with an antiproliferative effect on melanoma cells

**Revista:** J. Org. Chem. 85, 5941-5951, 2020

**DOI:** 10.1021/acs.joc.0c00276

**Autores:** J. A. Gálvez, R. Clavería-Gimeno, J. J. Galano-Frutos, J. Sancho, A. Velázquez-Campoy, O. Abian, M. D. Díaz-de-Villegas

**Título:** Stereoselective synthesis and biological evaluation as inhibitors of hepatitis C virus RNA polymerase of GSK3082 analogues with structural diversity at the 5- position

**Revista:** Eur. J. Med. Chem. 171, 401-419, 2019

**DOI:** 10.1016/j.ejmech.2019.03.019

**Autores:** A. Mahía, R. Badorrey, J. A. Gálvez, M. D. Díaz-de-Villegas

**Título:** Diastereoselective construction of the 6-oxa-2-azabicyclo[3.2.1]octane scaffold from chiral  $\alpha$ -hydroxyaldehyde derivatives by the Aza-Prins reaction

**Revista:** J. Org. Chem. 82, 8048-8057, 2017

**DOI:** 10.1021/acs.joc.7b01291

**Autores:** J. A. Gálvez, M. D. Díaz-de-Villegas, M. Alias, R. Badorrey

**Título:** Chiral iminoesters derived from D-glyceraldehyde in [3+2] cycloaddition reactions. Asymmetric synthesis of a key intermediate in the synthesis of neuramidinase inhibitors

**Revista:** J. Org. Chem. 78, 11404-11413, 2013

**DOI:** 10.1021/jo401967a

**Autores:** J. A. Díez, J. A. Gálvez, M. D. Díaz-de-Villegas, R. Badorrey, B. Bartholomew, R. J. Nash

**Título:** Stereoselective synthesis and biological evaluation of D-fagomine, D-3-epi-fagomine and D-3,4-epi-fagomine analogs from D-glyceraldehyde acetonide as a common building block

**Revista:** Org. Biomol. Chem. 10, 9278-9286, 2012

**DOI:** 10.1039/c2ob26732b

**Autores:** J. A. Gálvez, M. D. Díaz de Villegas, R. Badorrey, P. López Ram de Víu

**Título:** Switch in regioselectivity of epoxide ring-opening by changing the organometallic reagent

**Revista:** Org. Biomol. Chem. 9, 8155-8162, 2011

**DOI:** 10.1039/c1ob06216f

**Autores:** P. Etayo, R. Badorrey, M. D. Díaz de Villegas, J. A. Gálvez, P. López-Ram-de-Víu

**Título:** An expeditious method for the first asymmetric synthesis of dexoxadrol from the chiral pool

**Revista:** *Synlett* 1775-1778, **2010**

**DOI:** 10.1055/s-0030-1258110

**Autores:** A. Allepuz, R. Badorrey, M. D. Díaz de Villegas, J. A. Gálvez

**Título:** Diastereoselective reduction of ketimines derived from (*R*)-3,4-dihydroxybutan-2-one. An alternative route to key intermediates for the synthesis of anticancer agent ES-285

**Revista:** *Tetrahedron: Asymmetry* 21, 503-508, **2010**

**DOI:** 10.1016/j.tetasy.2010.02.012

**Autores:** A. Allepuz, R. Badorrey, M. D. Díaz de Villegas, J. A. Gálvez

**Título:** Asymmetric synthesis of ES-285, an anti-cancer agent isolated from marine sources

**Revista:** *Eur. J. Org. Chem.* 6172-6178, **2009**

**DOI:** 10.1002/ejoc.200900828

**Autores:** R. Badorrey, M. D. Díaz de Villegas, J. A. Gálvez

**Título:** Expedient asymmetric synthesis of (2*S*,3*S*)-Boc-phenylalanine epoxide, a key intermediate for the synthesis of biologically active compounds

**Revista:** *Tetrahedron: Asymmetry* 20, 2226-2229, **2009**

**DOI:** 10.1016/j.tetasy.2009.08.001

**Autores:** R. Badorrey, E. Portaña, M. D. Díaz de Villegas, J. A. Gálvez

**Título:** Stereocontrolled synthesis of orthogonally protected 2-substituted 4-aminopiperidines

**Revista:** *Org. Biomol. Chem.* 7, 2912-2918, **2009**

**DOI:** 10.1039/b904948g

**Autores:** P. Etayo, R. Badorrey, M. D. Díaz de Villegas, J. A. Gálvez

**Título:** First stereoselective synthesis of (1*R*,2*R*,4*R*)- and (1*S*,2*R*,4*S*)-2-substituted-1-azabicyclo[2.2.1]heptanes

**Revista:** *Eur. J. Org. Chem.* 1372-1376, **2009**

**DOI:** 10.1002/ejoc.200801216

**Autores:** P. Etayo, R. Badorrey, M. D. Díaz de Villegas, J. A. Gálvez

**Título:** Stereoselective synthesis of chiral 2,3-disubstituted 2,3-dihydro-4(1*H*)-pyridones

**Revista:** Eur. J. Org. Chem. 6008-6014, **2008**

**DOI:** 10.1002/ejoc.200800697

**Autores:** P. Etayo, R. Badorrey, M. D. Díaz de Villegas, J. A. Gálvez

**Título:** Asymmetric synthesis of a novel conformationally constrained lysine analogue with a piperidine skeleton

**Revista:** Eur. J. Org. Chem. 3474-3478, **2008**

**DOI:** 10.1002/ejoc.200800069

**Autores:** P. Etayo, R. Badorrey, M. D. Díaz de Villegas, J. A. Gálvez

**Título:** Asymmetric homologation of ketones. A new entry to orthogonally protected (2*R*,4*R*)-piperidine-2,4-dicarboxylic acid

**Revista:** J. Org. Chem. 73, 8594-8597, **2008**

**DOI:** 10.1021/jo801515k

**Autores:** P. Etayo, R. Badorrey, M. D. Díaz de Villegas, J. A. Gálvez

**Título:** Synthesis of (*R*)-quinuclidine-2-carboxylic acid in enantiomerically pure form

**Revista:** Tetrahedron Lett. 49, 2251-2253, **2008**

**DOI:** 10.1016/j.tetlet.2008.02.035

**Autores:** P. Etayo, R. Badorrey, M. D. Díaz de Villegas, J. A. Gálvez

**Título:** Efficient stereoselective synthesis of enantiopure *cis*- and *trans*-1,2,4-trisubstituted piperidines

**Revista:** Tetrahedron: Asymmetry, 18, 2812-2819, **2007**

**DOI:** 10.1016/j.tetasy.2007.10.042

**Autores:** R. Díez, R. Badorrey, M. D. Díaz de Villegas, J. A. Gálvez

**Título:** Highly stereoselective synthesis of stereochemically defined polyhydroxylated propargylamines by alkynylation of *N*-benzyl imines derived from (*R*)-glyceraldehyde

**Revista:** Eur. J. Org. Chem. 2114-2120, **2007**

**DOI:** 10.1002/ejoc.200601011

**Autores:** P. Etayo, R. Badorrey, M. D. Díaz de Villegas, J. A. Gálvez

**Título:** Base-controlled diastereodivergent synthesis of (*R*)- and (*S*)-2-substituted-4-alkylidenepiperidines by the Wadsworth-Emmons reaction

**Revista:** J. Org. Chem. 72, 1005-1008, 2007

**DOI:** 10.1021/jo062075c

**Autores:** P. Etayo, R. Badorrey, M. D. Díaz de Villegas, J. A. Gálvez

**Título:** Efficient stereodivergent synthesis of *cis*-(*2R,4S*) and *trans*-(*2R,4R*)-phosphonomehyl-2-piperidinecarboxylic acids from the same chiral starting imine derived from (*R*)-glyceraldehyde

**Revista:** Synlett 2799-2803, 2006

**DOI:** 10.1055/s-2006-950272

**Autores:** P. Etayo, R. Badorrey, M. D. Díaz de Villegas, J. A. Gálvez

**Título:** Unexpected epimerization at C<sub>2</sub> in the Horner-Wadsworth-Emmons reaction of chiral 2-substituted-4-oxopiperidines

**Revista:** Chem. Commun. 3420-3422, 2006

**DOI:** 10.1039/b608067g

**Autores:** R. Badorrey, C. Cativiela, M. D. Díaz de Villegas, R. Díez, F. Galbiati, J. A. Gálvez

**Título:** Highly diastereoselective cyanation of methyl ketimines obtained from (*R*)-glyceraldehyde

**Revista:** J. Org. Chem. 70, 10102-10105 2005

**DOI:** 10.1021/jo051592c

**Autores:** R. Badorrey, C. Cativiela, M. D. Díaz de Villegas, R. Díez, J. A. Gálvez

**Título:** The first asymmetric synthesis of 1,4-dideoxy-1,4-imino-D-talitol

**Revista:** Synlett 1734-1735, 2005

**DOI:** 10.1055/s-2005-871534

**Autores:** R. Badorrey, C. Cativiela, M. D. Díaz de Villegas, R. Díez, J. A. Gálvez

**Título:** Efficient stereodivergent synthesis of 1,4-dideoxy-1,4-iminohexitols from an (*S*)-glyceraldimine

**Revista:** Tetrahedron Lett. 45, 719-722, 2004

**DOI:** 10.1016/j.tetlet.2003.11.053

**Autores:** R. Badorrey, C. Cativiela, M. D. Díaz de Villegas, J. A. Gálvez

**Título:** Study of the Lewis acid promoted addition of silylenol ethers to imines derived from glyceraldehyde

**Revista** Tetrahedron Lett. 44, 9189-9192, 2003

**DOI:** 10.1016/j.tetlet.2003.10.027

**Autores:** R. Badorrey, C. Cativiela, M. D. Díaz de Villegas, R. Díez, J. A. Gálvez

**Título:** Study of the reaction between vinylmagnesium bromide and imines derived from (*R*)-glyceraldehyde. The key step in the stereodivergent synthesis of conveniently protected, enantiopure *syn* and *anti* 2-amino-1,2,4-butanetriol derivatives

**Revista:** Eur. J. Org. Chem, 2268-2275, 2003

**DOI:** 10.1002/ejoc.200200631

**Autores:** R. Badorrey, C. Cativiela, M. D. Díaz de Villegas, R. Díez, J. A. Gálvez

**Título:** Stereodivergent addition of allylmetal reagents to imines derived from (*R*)-2,3-di-O-benzylglyceraldehyde via appropriate metal selection and double stereodifferentiation

**Revista:** Eur. J. Org. Chem. 3763-3767, 2002

**DOI:** 10.1002/1099-0690(200211)2002:22<3763::AID-EJOC3763>3.0.CO;2-K

**Autores:** R. Badorrey, C. Cativiela, M. D. Díaz de Villegas, J. A. Gálvez

**Título:** Highly convergent stereoselective synthesis of chiral key intermediates in the synthesis of Palinavir from imines derived from L-glyceraldehyde

**Revista:** Tetrahedron 58, 341-354, 2002

**DOI:** 10.1016/S0040-4020(01)01152-8

**Autores:** R. Badorrey, C. Cativiela, M. D. Díaz de Villegas, J. A. Gálvez

**Título:** Asymmetric synthesis of (2*R*,3*S*)-4-halo-3-benzyloxy-2-(*N*-methoxycarbonyl-*N*-benzylamino)butyronitriles as precursors for the synthesis of  $\beta$ -hydroxy- $\alpha$ -amino acids

**Revista:** Tetrahedron: Asymmetry 11, 1015-1025, 2000

**DOI:** 10.1016/S0957-4166(00)00022-7

**Autores:** R. Badorrey, C. Cativiela, M. D. Díaz de Villegas, J. A. Gálvez

**Título:** Stereocontrolled synthesis of all four stereoisomers of fully protected 2-amino-3-hydroxypentanoic acid from imines derived from (*R*)-glyceraldehyde

**Revista:** Tetrahedron 55, 14145-14160, 1999

**DOI:** 10.1016/S0040-4020(99)00880-7

**Autores:** R. Badorrey, C. Cativiela, M. D. Díaz de Villegas, J. A. Gálvez

**Título:** Study of the reaction of imines derived from (*R*)-glyceraldehyde with Danishefsky's diene

**Revista:** Tetrahedron 55, 7601-7612, 1999

**DOI:** 10.1016/S0040-4020(99)00377-4

**Autores:** C. Cativiela, M. D. Díaz de Villegas, J. A. Gálvez

**Título:** Chiral hydrazone derived from D-glyceraldehyde a convenient starting material to the stereoselective synthesis of  $\alpha$ -hydrazino acids

**Revista:** Tetrahedron: Asymmetry 8, 1605-1610, 1997

**DOI:** 10.1016/S0957-4166(97)00128-6

**Autores:** R. Badorrey, C. Cativiela, M. D. Díaz de Villegas, J. A. Gálvez

**Título:** Asymmetric hetero Diels-Alder of *N*-benzylimines derived from *R*-glyceraldehyde a new approach to homochiral piperidine building blocks and its application to the synthesis of (2*R*)-4-oxopipeolic acid

**Revista:** Tetrahedron Lett. 38, 2547-2550, 1997

**DOI:** 10.1016/S0040-4039(97)00397-3

**Autores:** R. Badorrey, C. Cativiela, M. D. Díaz de Villegas, J. A. Gálvez

**Título:** Reversal of the stereochemical course of phenylmagnesium bromide addition to *N*-benzylimines derived from (*R*)-glyceraldehyde depending on the O-protecting group and its application to the synthesis of both enantiomers of phenylglycine

**Revista:** Tetrahedron 53, 1411-1416, 1997

**DOI:** 10.1016/S0040-4020(96)01053-8

**Autores:** R. Badorrey, C. Cativiela, M. D. Díaz de Villegas, J. A. Gálvez

**Título:** A convenient synthesis of *N*-(*tert*-butoxycarbonyl)-L- $\alpha$ -vinylglycine from D-mannitol

**Revista:** Synthesis, 747-749, 1997

**DOI:** 10.1055/s-1997-3184

**Autores:** C. Cativiela, M. D. Díaz de Villegas, J. A. Gálvez, J. I. García

**Título:** Diastereoselective Strecker reaction of D-Glyceraldehyde derivatives. A novel route to (2*S*,3*S*)- and (2*R*,3*S*)-2-amino-3,4-dihydroxybutyric acid

**Revista:** Tetrahedron 52, 9563-9574, 1996

**DOI:** 10.1016/0040-4020(96)00493-0

**Autores:** C. Cativiela, M. D. Díaz de Villegas, J. A. Gálvez

**Título:** Stereoselective synthesis of  $\alpha$ -hydroxy- $\beta$ -amino acids using D-glyceraldehyde as the homochiral source

**Revista:** Tetrahedron: Asymmetry 7, 529-536, 1996

**DOI:** 10.1016/0957-4166(96)00037-7

**Autores:** C. Cativiela, M. D. Díaz de Villegas, J. A. Gálvez

**Título:** Diastereoselective Strecker reaction of imines derived from D-glyceraldehyde. A new route to  $\beta$ -hydroxy- $\alpha$ -amino acids

**Revista:** Tetrahedron Lett. 36, 2859-2860, 1995

**DOI:** 10.1016/0040-4039(95)00367-L