

## Ácido kauradienoico

### **Características físicas**

Brieskorn CH, Poehlmann E. 1969. Kaura-9(11)16-dien-19-oic acid and 15 $\alpha$ -acetoxy-kaur-16-en-19-oic acid. *Chem Ber* 102(8): 2621-2628.

### **Punto de fusión (º), Rotación específica (º)**

Zamilpa A, Tortoriello J, Navarro V, Delgado G, Alvarez L. 2002. Antispasmodic and antimicrobial diterpenic acids from *Viguiera hypargyrea* roots. *Planta Med* 68(3): 281-283.

### **Espectroscopia Bidimensional HMBC, HSQC, COLOC, FLOCK**

Reynolds WF, Enriquez RG. 2001. Gradient-selected versus phase-cycled HMBC and HSQC: pros and cons. *Magn Reson Chem* 39(9): 531-538.

### **RMN<sup>13</sup>C**

Qiang Y, Du DL, Chen YJ, Gao K. 2011. ent-Kaurane diterpenes anf further constituents from *Wedelia trilobata*. *Helv Chim Acta* 94(5): 817-823.

### **RMN<sup>1</sup>H**

Batista R, Braga FC, Oliveira AB. 2005. Quantitative determination by HPLC of ent-kaurenoic and grandiflorenic acids in aerial parts pd *Wedelia paludosa* D.C. *Revista Brasileira de Farmacognosia* 15(2): 119-125.

### **NOE, NOESY**

Enriquez RG, Barajas J, Ortiz B, Lough AJ, Reynolds WF, Yu M, Leon I, Gnecco D. 1997. Comparison of cristal and solution structures and <sup>1</sup>H and <sup>13</sup>C chemical Schifts for grandiflorenic acid, kaurenoic acid, and mogynoic acid. *Can J Chem* 75(3): 342-347.

### **EM**

Enriquez RG, Miranda-G E, Ortiz B, Leon I, Peña WF, Gnecco D. 1996. The unambiguous detection of kaurenic derivatives in aqueous infusions of *Montanoa tomentosa* by GC-MS and 2D-NMR spectroscopy. An answer to contradictory reports. *Planta Med* 62(6): 569-571.

### **Actividad cardiovascular y diurética**

Somova LI, Shode FO, Moodley K, Govender Y. 2001. Cardiovascular and diuretic activity of kaurene derivatives of *Xylopia aethiopica* and *Alepidea amatymbica*. *J Ethnopharmacol* 77(2-3): 165-174.

### **Potencial actividad curativa de heridas, inhibiendo la fase inflamatoria al reducir citoquinas de macrófagos de células Raw 264.7**

Balekar N, Nakpheng T, Srichana T. 2013. Wound-healing potential of grandiflorenic acid isolated from *Wedelia trilobata* (L.) leaves. *Songklanakarin Journal of Science and Technology* 35(5): 537-546.

### **Efecto estimulante en células de fibroblastos L929, indicando actividad potencial en la cura de heridas**

Balekar N, Nakpheng T, Srichana T. 2013. In vitro stimulatory effect of grandiflorenic acid isolated from *Wedelia trilobata* (L.) leaves on L929 fibroblast cells. *Thai Journal of Pharmaceutical Sciences* 37(3): 117-124.

### **Efecto vaso relajante en anillos aórticos.**

Mondolis E, Moran-Pinzon JA, Rojas-Marquez FA, Lopez-Perez JL, Abad A, Amaro-Luis JM, Guerrero de Leon E. 2013. Vasorelaxant effects in aortic rings of eight diterpenoids isolated from

three Venezuelan plants. Revista Brasileira de Farmacognosia 23(5): 769-775.