

## Kaurenoic acid Datasheet

4<sup>th</sup> Edition (Revised in July, 2016)

### [ Product Information ]

**Name:** Kaurenoic acid

**Catalog No.:** CFN97703

**Cas No.:** 6730-83-2

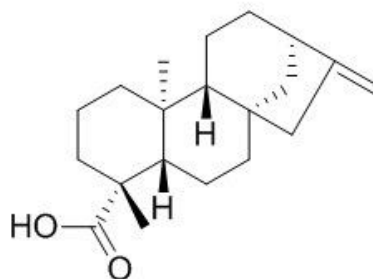
**Purity:** > 98%

**M.F:** C<sub>20</sub>H<sub>30</sub>O<sub>2</sub>

**M.W:** 302.46

**Physical Description:** Powder

**Synonyms:** Cunabic acid; Kaurane-16-ene-18-oic acid; (-)-Kaur-16-en-18-oic acid; ent-16-Kauren-19-oic acid.



### [ Intended Use ]

1. Reference standards;
2. Pharmacological research;
3. Food and cosmetic research;
4. Synthetic precursor compounds;
5. Intermediates & Fine Chemicals;
6. Ingredient in supplements, beverages;
7. Others.

### [ Source ]

The herb of *Ricinocarpus stylosus*.

## **[ Biological Activity or Inhibitors]**

Kaurenoic acid, a diterpene isolated from *Copaifera langsdorffii* oleo-resin, has cytotoxic and embryotoxic effects.<sup>[1]</sup>

Kaurenoic acid has anti-inflammatory potential in acetic acid-induced colitis, decreases in MDA level, an indicator of lipoperoxidation in colon tissue. <sup>[2]</sup>

Kaurenoic acid exerts a uterine relaxant effect acting principally through calcium blockade and in part, by the opening of ATP-sensitive potassium channels.<sup>[3]</sup>

Kaurenoic acid exhibits an analgesic effect in a consistent manner and that its mechanisms involve the inhibition of cytokine production and activation of the NO-cyclic GMP-protein kinase G-ATP-sensitive potassium channel signaling pathway.<sup>[4]</sup>

Kaurenoic acid derivatives has antimicrobial activity of substituted on carbon-15 at concentrations greater than or equal to 250 micrograms/ml.<sup>[5]</sup>

Kaurenoic acid has inhibitory effects on LPS-induced inflammatory response in RAW264.7 macrophages.<sup>[6]</sup>

## **[ Solvent ]**

Chloroform, Dichloromethane, DMSO, Acetone, Methanol.

## **[ HPLC Method ]**<sup>[7]</sup>

Mobile phase: Acetonitrile-Phosphoric acid H<sub>2</sub>O(pH 3.0), gradient elution;

Flow rate: 1.0 ml/min;

Column temperature: 35 °C;

The wave length of determination: 210 nm.

## **[ Storage ]**

2-8°C, Protected from air and light, refrigerate or freeze.

## **[ References ]**

- [1] Costa-Lotufo L V, Cunha G M A, Farias P A M, *et al. Toxicon*, 2002, 40(8):1231-4.
- [2] Paiva L A F, Gurgel L A, Silva R M, *et al. Vascular Pharmacol.*, 2002, 39(6):303-7.
- [3] De A C K M, Paiva L A F, Santos F A, *et al. Phytother .Res.*, 2003, 17(4):320-4.
- [4] Mizokami S S, Arakawa N S, Ambrosio S R, *et al. J. Nat. Prod.*, 2012, 75(5):896-904.
- [5] Davino S C, Giesbrecht A M, Roque N F. *Brazilian Journal of Medical and Biological Research*, 1989, 22(9):1127-9.
- [6] Ran J C, Shin E M, Jung H A, *et al. Phytomed. Int. J. Phytother. Phytopharmacol.*, 2011, 18(8-9):677-82.
- [7] Fucina G, Block L C, Baccarin T, *et al. Talanta*, 2012, 101(22):530-6.

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