

## Gamabufotalin Datasheet

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

### [ Product Information ]

**Name:** Gamabufotalin

**Catalog No.:** CFN90212

**Cas No.:** 465-11-2

**Purity:** > 98%

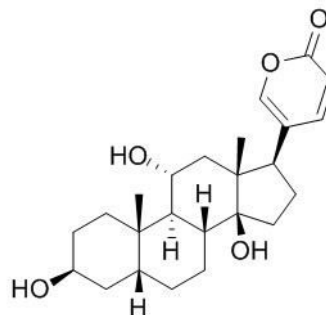
**M.F:** C<sub>24</sub>H<sub>34</sub>O<sub>5</sub>

**M.W:** 402.52

**Physical Description:** Powder

**Synonyms:** 22-dienolide,3,11,14-trihydroxy-,(3-beta,5-beta,11-alpha)-bufa-2;

3,11,14-Trihydroxybufa-20,22-dienolide;3-beta,11-alpha,14-Trihydroxy-5-beta-bufa-20,22-dienolide.



### [ Intended Use ]

1. Reference standards;
2. Pharmacological research;
3. Food and cosmetic research;
4. Synthetic precursor compounds;
5. Others.

### [ Source ]

The secretion of *Bufo vulgaris formosus*.

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

Gamabufotalin(CS-6), a bufadienolide compound from toad venom, suppresses COX-2 expression through targeting IKK $\beta$ /NF- $\kappa$ B signaling pathway in lung cancer cells, suggests that CS-6 exhibits potential use in the treatment of COX-2-mediated diseases such as lung cancer.<sup>[1]</sup>

Gamabufotalin has been shown to strongly inhibit cancer cell growth and inflammatory response, CS-6 inhibits angiogenesis by inhibiting the activation of VEGFR-2 signaling pathways and CS-6 could be a potential candidate in angiogenesis-related disease therapy.<sup>[2]</sup>

Gamabufotalin triggers c-Myc degradation via induction of WWP2 in multiple myeloma(MM) cells, it may be as a promising therapeutic agent in the treatment of MM.<sup>[3]</sup>

## **[ Solvent ]**

Chloroform, Dichloromethane, Ethyl Acetate, DMSO.

## **[ HPLC Method ]**<sup>[4]</sup>

Mobile phase: Acetonitrile- 0.3% Aqueous acetic acid, gradient elution ;

Flow rate: 0.8 ml/min;

Column temperature: Room Temperature;

The wave length of determination: 296 nm.

## **[ Storage ]**

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

## **[ References ]**

[1] Yu Z, Guo W, Ma X, *et al. Mol. Cancer*, 2014, 13(1):1-14.

[2] Tang N, Shi L, Yu Z, *et al. Oncotarget*, 2015, 7(3):3533-47.

[3] Yu Z, Li T, Wang C, *et al. Oncotarget*, 2016, 7(13):15725-37.

[4] Ma X C, Zhang B J, Xin X L, *et al. Nat. Prod. Commun.*, 2009, 4(4):179-84.

## **[ Contact ]**

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