



**CAS Registry Number:** 117048-59-6  
**Type of Compound Code(s):** VG4000  
**Molecular Formula:** C<sub>18</sub>H<sub>20</sub>O<sub>5</sub>  
**Molecular Weight:** 316.353  
**Accurate Mass:** 316.131075  
**Percentage Composition:** C 68.34%; H 6.37%; O 25.29%  
**Biological Source:** Constit. of *Combretum caffrum*  
**Biological Use/Importance:** Cytotoxic. Cell growth and tubulin inhibitor  
**Physical Description:** Amorph.  
**Melting Point:** Mp 103-104°  
**Solubility:** BERDY SOL: Sol. MeOH, CHCl<sub>3</sub>; poorly sol. H<sub>2</sub>O

>>Derivative: 3',4'-Di-Me, 3",4"-methylene ether

**Synonym(s):** 3-Hydroxy-3',4'-dimethoxy-4,5-methylenedioxystilbene. **Combretastatin A<sub>2</sub>**

**CAS Registry Number:** 111394-44-6  
**Type of Compound Code(s):** VG4000  
**Molecular Formula:** C<sub>17</sub>H<sub>16</sub>O<sub>5</sub>  
**Molecular Weight:** 300.31  
**Accurate Mass:** 300.099775  
**Percentage Composition:** C 67.99%; H 5.37%; O 26.64%  
**Biological Source:** Constit. of *Combretum caffrum*  
**Physical Description:** Oil  
**UV:** [neutral] λ<sub>max</sub> 223 (ε 17175); 303 (ε 7190) (MeOH) (Berdy)

>>Derivative: 1,2-Dihydro

see 1-(3,4-Dihydroxyphenyl)-2-(3,4,5-trihydroxyphenyl)ethane, [GMZ07-T](#)

#### References:

- Pettit, G.R. *et al.*, *Can. J. Chem.*, 1987, **65**, 2390  
Nandy, P. *et al.*, *Pharm. Res.*, 1991, **8**, 776, (*pharmacol*)  
Pettit, G.R. *et al.*, *J. Med. Chem.*, 1995, **38**, 1666  
Fuerstner, A. *et al.*, *Annalen*, 1996, 2107, (*synth, ir, pmr, cmr*)  
Orsini, F. *et al.*, *Carbohydr. Res.*, 1997, **301**, 95-109, (*synth, pmr, cmr, Combrestatin A<sub>4</sub>*)  
Lawrence, N.J. *et al.*, *Synthesis*, 1999, 1656-1660, (*Combretastatin A<sub>4</sub>*)  
Pettit, G.R. *et al.*, *Synthesis*, 1999, 1666-1672, (*Combretastatin A<sub>4</sub>, Combretastatin A<sub>5</sub>, Combretastatin A<sub>6</sub>, isol, synth*)  
Fuerstner, A. *et al.*, *Synthesis*, 1999, 2107-2113, (*Combretastatin A<sub>4</sub>, Combretastatin A<sub>5</sub>, synth*)  
Pettit, G.R. *et al.*, *Synthesis*, 1999, 2390-2396, (*Combretastatin A<sub>2</sub>, Combrestastain A<sub>3</sub>, isol, synth*)  
Gaukroger, K. *et al.*, *J.O.C.*, 2001, **66**, 8135-8138, (*Combretastatin A<sub>4</sub>, synth*)