



**Accurate Mass:** 512.38656  
**Percentage Composition:** C 77.30%; H 10.22%; O 12.48%  
**Biological Source:** Isol. from *Callicarpa arborea*, *Loranthus falcatus* and other plants  
**Melting Point:** Mp 218-220°  
**Optical Rotation:**  $[\alpha]_D +69$  (CHCl<sub>3</sub>)

>>Derivative: 3-Hexadecanoyl

**CAS Registry Number:** 19833-14-8

**Molecular Formula:** C<sub>46</sub>H<sub>78</sub>O<sub>4</sub>  
**Molecular Weight:** 695.12  
**Accurate Mass:** 694.59001  
**Percentage Composition:** C 79.48%; H 11.31%; O 9.21%  
**Biological Source:** Isol. from *Madhuca longifolia*  
**Melting Point:** Mp 145°

>>Derivative: 3-O-(3-Carboxypropanoyl)  
**Synonym(s):** Succinoyloleanolic acid

**CAS Registry Number:** 4847-30-7

**Molecular Formula:** C<sub>34</sub>H<sub>52</sub>O<sub>6</sub>  
**Molecular Weight:** 556.781  
**Accurate Mass:** 556.37639  
**Percentage Composition:** C 73.35%; H 9.41%; O 17.24%  
**Use/Importance:** Solubilised deriv. of oleanolic acid showing increased bioavailability. Has been used as antiinflammatory and antihepatitis drug in East Asia  
**Melting Point:** Mp 260-265°

>>Derivative: 3-O-(4-Hydroxycinnamoyl)(E-)  
**Synonym(s):** E-Coumaroyloleanolic acid

**CAS Registry Number:** 151334-06-4

**Molecular Formula:** C<sub>39</sub>H<sub>54</sub>O<sub>5</sub>  
**Molecular Weight:** 602.853  
**Accurate Mass:** 602.397125  
**Percentage Composition:** C 77.70%; H 9.03%; O 13.27%  
**Biological Source:** Constit. of *Securinega tinctoria* and *Casuarina equisetifolia*  
**Physical Description:** Cryst. (CHCl<sub>3</sub>)  
**Melting Point:** Mp 141-141°. Mp 292-296 dec.°  
**Optical Rotation:**  $[\alpha]_D +104$  (c, 0.2 in dioxan)  
**UV:** [neutral]  $\lambda_{max}$  225 ( $\epsilon$  23700); 310 ( $\epsilon$  22400) (dioxan)

>>Derivative: 3-O-(4-Hydroxycinnamoyl)(Z-)  
**Synonym(s):** Z-Coumaroyloleanolic acid

**CAS Registry Number:** 243667-92-7

**Molecular Formula:** C<sub>39</sub>H<sub>54</sub>O<sub>5</sub>  
**Molecular Weight:** 602.853  
**Accurate Mass:** 602.397125  
**Percentage Composition:** C 77.70%; H 9.03%; O 13.27%  
**Biological Source:** Constit. of *Casuarina equisetifolia*  
**Physical Description:** Cryst.  
**Melting Point:** Mp 245-247°  
**Optical Rotation:**  $[\alpha]_D^{20} +89.5$  (c, 0.2 in Me<sub>2</sub>CO)  
**UV:** [neutral]  $\lambda_{max}$  225 ( $\epsilon$  12900); 308 ( $\epsilon$  18100) (dioxan)