

**Product Name** : (±)-Equol

**Synonyms** : —

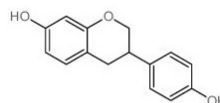
**Cat No.** : M19273

**CAS Number** : 94105-90-5

**Molecular Formula** : C<sub>15</sub>H<sub>14</sub>O<sub>3</sub>

**Formula Weight** : 242.3

**Chemical Name** : —



**Description** : Equol is a non-steroidal estrogen produced from the metabolism of the isoflavonoid phytoestrogen daidzen by human intestinal microflora. The estrogen receptor (ER) agonist activity of the naturally occurring (S)-enantiomer (EC<sub>50</sub>= 85 and 65 nM for human ER $\alpha$  and ER $\beta$ , respectively) is similar to that of genistein but exceeds that of daidzein. (S)-Equol preferentially binds ER $\beta$  (K<sub>i</sub>= 0.73 nM) and demonstrates approximately 9-fold lower affinity for ER $\alpha$  (K<sub>i</sub>= 6.41 nM). (S)-equol is also a potent antagonist of dihydrotestosterone, which has important implications for prostate cancer and other androgen-mediated pathologies.

**Pathway** : Others

**Target** : Other Targets

**Receptor** : ER $\alpha$ ; ER $\beta$

**Solubility** : DMSO :  $\geq$  100 mg/mL; 412.76 mM

**SMILES** : C1C(COc2ccc(cc2)O)c1ccc(cc1)O

**Storage** : (-20°C)

**Stability** :  $\geq$  2 years

**Reference** :

1. Mahalingam S, Gao L, Gonnering M, Helferich W, et al. Toxicol Appl Pharmacol. 2016 Mar 15;295:47-55.