

Target Name	17-beta-HSD
Target TTD ID	TTDR00587

Target Species	Fungus
Chemical Type	Flavonoids
Mode of Action	Inhibitor
QSAR Model 1	$\log(1/IC_{50}) = (1.75 \times 10^1 \pm 3.62) \cdot D_1 + (1.51 \times 10^{-1} \pm 3.76 \times 10^{-2}) \cdot D_2$ $- (4.18 \times 10^2 \pm 1.42 \times 10^2) - (7.41 \times 10^1 \pm 1.61 \times 10^1) \cdot D_4$ $- (7.42 \times 10^1 \pm 2.59 \times 10^1)$ <p><math>N = 33, r = 0.867, F = 21.11, s^2 = 0.5073, r_{cv}^2 = 0.6302</math></p>
QSAR Model 2	$\log(1/IC_{50}) = (2.39 \times 10^2 \pm 3.54 \times 10^1) \cdot D_5 + (1.22 \times 10^1 \pm 2.85) \cdot D_6$ $- (2.32 \pm 5.43 \times 10^{-1}) \cdot D_7 + (5.19 \times 10^1 \pm 1.64) \cdot D_8 - (1.71 \times 10^2 \pm 5.36 \times 10^1)$ <p><math>N = 30, r = 0.885, F = 22.79, s^2 = 0.3508, r_{cv}^2 = 0.6942</math></p>
Molecular Descriptor	<p>Access the following web-servers to compute molecular descriptors: <a href="#">MoDel</a> and <a href="#">e-dragon</a></p> <p>Specification of descriptors used in the derived 4-parameter QSAR models, along with the t test values for all of the descriptors (g—geometrical, q—quantum-chemical descriptors)</p> <p>D5: Max electroph. react. index for an O atom</p> <p>D6: Min. exchange energy for a C–H bond</p> <p>D7: Min. atomic state energy for a C atom</p> <p>D8: Max 1-electron react. index for a C atom</p>
Reference	Flavonoids and cinnamic acid esters as inhibitors of fungal 17 $\beta$ -hydroxysteroid dehydrogenase: A synthesis, QSAR and modelling study. <i>Bioorganic &amp; Medicinal Chemistry</i> 14 (2006) 7404–7418

<b>Target Species</b>	Fungus
<b>Chemical Type</b>	Cinnamic acid esters
<b>Mode of Action</b>	Inhibitor
<b>QSAR Model 1</b>	$\log(1/IC_{50}) = (1.75 \times 10^1 \pm 3.62) \cdot D_1 + (1.51 \times 10^{-1} \pm 3.76 \times 10^{-2}) \cdot D_2$ $- (4.18 \times 10^2 \pm 1.42 \times 10^2) - (7.41 \times 10^1 \pm 1.61 \times 10^1) \cdot D_4$ $- (7.42 \times 10^1 \pm 2.59 \times 10^1)$ <p><math>N = 33, r = 0.867, F = 21.11, s^2 = 0.5073, r_{cv}^2 = 0.6302</math></p>
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