

Product Datasheet

(R)-Equol (orb1940761)

Catalog Number	orb1940761
Category	Small Molecules
Description	<p>(R)-Equol is an ERα and ERβ agonist with Kis of 27.4 and 15.4 nM, respectively.(In Vitro):(R)-Equol produced a dose-dependent inhibitory effect on the invasive ability of MDA-MB-231 cells, and this inhibitory effect was obvious at the highest test concentration (50 μM).Following 48-h exposure to (R)-Equol, invasion is reduced by 62% (p=0.009, versus untreated cells) with 50 μM (R)-Equol. Matrix metalloproteinase-2 (MMP-2) expression is significantly down-regulated following treatment with 50 μM (R)-Equol (p=0.035) .(In Vivo):In Animals, (R)-Equol has a significantly reduced number of palpable tumors over time when compared with Controls (P=0.002).In addition, the number of palpable tumors formed by each rat in the (R)-Equol fed group was significantly lower than that of rats treated with S-(-)equol (P = 0.008). (R)-Equol-fed animals have 43% fewer tumors than the control group and this difference is highly statistically significant (P=0.004). The number of tumors/tumor-bearing animals is significantly lower in the animals fed (R)-Equol compare with Controls (3.3\pm0.4 versus 5.5\pm0.5, P=0.004). At necropsy, the mean (\pmSEM) tumor weight per animal for (R)-Equol fed rats (5.3\pm1.1 mg) is significantly reduced (P=0.04) when compared with Controls (9.9\pm1.4 mg). Feeding the (R)-Equol diet results in significantly increased tumor latency (P=0.003) .</p>
Target	Estrogen Receptor/ERR
Purity	>98% (HPLC)
MW	242.274
Target Areas	mPGES-1
Solubility (25°C)	In Vitro: DMSO : 100 mg/mL (412.76 mM)
CAS Number	221054-79-1

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Formula	$C_{15}H_{14}O_3$
SMILES	<chem>Oc1ccc(cc1)[C@@H]1COc2cc(O)ccc2C1</chem>
Storage	Storage temperature: -20°C. Stability: ≥ 2 years
Note	For research use only
Expiration Date	12 months from date of receipt.

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