

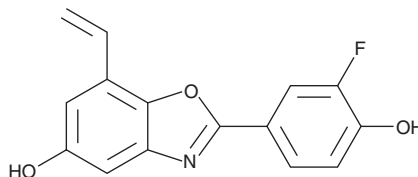
PRODUCT INFORMATION



ERB 041

Item No. 28737

CAS Registry No.: 524684-52-4
Formal Name: 7-ethenyl-2-(3-fluoro-4-hydroxyphenyl)-5-benzoxazolol
MF: C₁₅H₁₀FNO₃
FW: 271.2
Purity: ≥95%
UV/Vis.: λ_{max}: 216, 247, 309, 338 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

ERB 041 is supplied as a crystalline solid. A stock solution may be made by dissolving the ERB 041 in the solvent of choice, which should be purged with an inert gas. ERB 041 is soluble in the organic solvent DMSO at a concentration of approximately 25 mg/ml.

Description

ERB 041 is an estrogen receptor β (ERβ) agonist (IC₅₀s = 5.4, 3.1, and 3.7 nM for the human, rat, and mouse receptors, respectively).¹ It is selective for ERβ over ERα (IC₅₀s = 1,200, 620, and 750 nM for human, rat, and mouse ERα, respectively). ERB 041 induces *IGFBP4* mRNA expression in Saos-2 cells expressing human ERβ (EC₅₀ = 20 nM). *In vivo*, ERB 041 (0.1 and 0.3 mg/kg) inhibits chronic diarrhea and reduces colonic ulceration, inflammation, and fibrosis in the *HLA-B27* transgenic rat model of inflammatory bowel disease. It reduces joint swelling in a rat model of adjuvant-induced arthritis when administered at a dose of 1 mg/kg. ERB 041 (10 mg/kg) also reduces lesion formation in a mouse model of endometriosis.²

References

- Harris, H.A., Albert, L.M., Leathurby, Y., *et al.* Evaluation of an estrogen receptor-β agonist in animal models of human disease. *Endocrinology* **144**(10), 4241-4249 (2003).
- Harris, H.A., Bruner-Tran, K.L., Zhang, X., *et al.* A selective estrogen receptor-β agonist causes lesion regression in an experimentally induced model of endometriosis. *Hum. Reprod.* **20**(4), 936-941 (2005).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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