

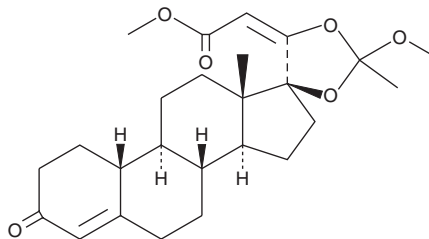
PRODUCT INFORMATION



YK-11

Item No. 9003137

CAS Registry No.: 1370003-76-1
Formal Name: (20E)-17 α ,20-[(1-methoxyethylidene)bis(oxy)]-3-oxo-19-norpregna-4,20-diene-21-carboxylic acid, methyl ester
MF: C₂₅H₃₄O₆
FW: 430.5
Purity: \geq 95% (mixture of diastereomers)
UV/Vis.: λ_{max} : 242 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: \geq 4 years



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

Laboratory Procedures

YK-11 is supplied as a crystalline solid. A stock solution may be made by dissolving the YK-11 in the solvent of choice. YK-11 is soluble in organic solvents such as ethanol, methanol, and acetonitrile, which should be purged with an inert gas. The solubility of YK-11 in these solvents is approximately 1 mg/ml.

Description

YK-11 is an androgen receptor partial agonist that activates androgen receptor transcriptional activity in HEK293 cells overexpressing androgen receptors when used at a concentration of 0.1 μ M.¹ It induces expression of the androgen receptor target genes *FKBP51* and *FGF18* in HEK293 cells when used at a concentration of 10 μ M. YK-11 accelerates nuclear translocation of androgen receptors without inducing interaction between the androgen receptor N- and C-termini. In C2C12 cells, YK-11 (500 nM) increases expression of the myogenic regulatory factors MyoD, Myf5, and myogenin, as well as follistatin (Fst), and induces myogenic differentiation.² YK-11 also accelerates proliferation and mineralization and increases expression of the osteoblast differentiation markers osteoprotegerin and osteocalcin in MC3T3-E1 mouse osteoblast cells.³

References

1. Kanno, Y., Hikosaka, R., Zhang, S.-Y., *et al.* (17 α ,20E)-17,20-[(1-Methoxyethylidene)bis(oxy)]-3-oxo-19-norpregna-4,20-diene-21-carboxylic acid methyl ester (YK11) is a partial agonist of the androgen receptor. *Biol. Pharm. Bull.* **34(3)**, 318-323 (2011).
2. Kanno, Y., Ota, R., Someya, K., *et al.* Selective androgen receptor modulator, YK11, regulates myogenic differentiation of C2C12 myoblasts by follistatin expression. *Biol. Pharm. Bull.* **36(9)**, 1460-1465 (2013).
3. Yatsu, T., Kusakabe, T., Kato, K., *et al.* Selective androgen receptor modulator, YK11, up-regulates osteoblastic proliferation and differentiation in MC3T3-E1 cells. *Biol. Pharm. Bull.* **41(3)**, 394-398 (2018).

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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