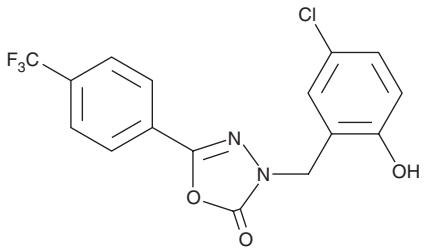
PRODUCT INFORMATION

BMS 191011

Item No. 22299

CAS Registry No.:	202821-81-6
Formal Name:	3-[(5-chloro-2-hydroxyphenyl)methyl]-5-[4-(trifluoromethyl)phenyl]-1,3,4-oxadiazol-2(3H)-one
MF:	$C_{16}H_{10}ClF_3N_2O_3$
FW:	370.7
Purity:	≥95%
UV/Vis.:	λ_{max}: 280 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

BMS 191011 is supplied as a crystalline solid. A stock solution may be made by dissolving the BMS 191011 in the solvent of choice, which should be purged with an inert gas. BMS 191011 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of BMS 191011 in ethanol is approximately 3 mg/ml and approximately 10 mg/ml in DMSO and DMF.

BMS 191011 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, BMS 191011 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. BMS 191011 has a solubility of approximately 0.3 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

BMS 191011 is an activator of large-conductance calcium-activated potassium (K_{Ca}1.1/BK) channels that increases maximum potassium current to 126% of control in *X. laevis* oocytes expressing human K_{Ca}1.1channels when used at a concentration of 1 µM.[1] *In vivo*, BMS 191011 (10-100 µg/kg, i.v.) increases the diameter of retinal arterioles without affecting blood pressure or heart rate in rats, an effect that is reversed by the K_{Ca}1.1 channel blocker iberiotoxin (Item No. 14608).[2]

References

1. Romine, J.L., Martin, S.W., Meanwell, N.A., *et al.* 3-[(5-Chloro-2-hydroxyphenyl)methyl]-5-[4-(trifluoromethyl)phenyl]-1,3,4-oxadiazol-2(3H)-one, BMS-191011: Opener of large-conductance Ca^{2+}-activated potassium (maxi-K) channels, identification, solubility, and SAR. *J. Med. Chem.* **50(3),** 528-542 (2007).
2. Mori, A., Suzuki, S., Sakamoto, K., *et al.* BMS-191011, an opener of large-conductance Ca^{2+}-activated potassium channels, dilates rat retinal arterioles *in vivo*. *Biol. Pharm. Bull.* **34(1),** 150-152 (2011).

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