

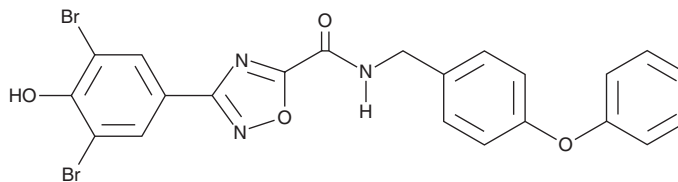
PRODUCT INFORMATION



IOWH-032

Item No. 30273

CAS Registry No.: 1191252-49-9
Formal Name: 3-(3,5-dibromo-4-hydroxyphenyl)-
N-[(4-phenoxyphenyl)methyl]-
1,2,4-oxadiazole-5-carboxamide
MF: C₂₂H₁₅Br₂N₃O₄
FW: 545.2
Purity: ≥98%
UV/Vis.: λ_{max}: 218 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

IOWH-032 is supplied as a crystalline solid. A stock solution may be made by dissolving the IOWH-032 in the solvent of choice, which should be purged with an inert gas. IOWH-032 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of IOWH-032 in these solvents is approximately 30 mg/ml.

IOWH-032 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, IOWH-032 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. IOWH-032 has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

IOWH-032 is a modulator of the cystic fibrosis transmembrane conductance regulator (CFTR).^{1,2} It inhibits CFTR in T84 human colon cells (IC₅₀ = 8.51 μM).¹ It has rapid inhibitory and slow potentiating effects on human CFTR with apparent K_d values of 6.1 and 0.64 nM, respectively.² IOWH-032 (20 nM) also potentiates currents through CFTR bearing the F508 deletion mutation (ΔF508-CFTR) expressed in *X. laevis* oocytes. It inhibits, but does not potentiate, mouse CFTR with an apparent K_d value of 42.9 μM.

References

1. Doyle, K.J., Jones, G.P., Russell, M.G.N., *et al.* Compounds, compositions and methods comprising heteroaromatic derivatives. *Institute for OneWorld Health*. **US2009/0318429A1** (2009).
2. Cui, G., Khazanov, N., Stauffer, B.B., *et al.* Potentiators exert distinct effects on human, murine, and *Xenopus* CFTR. *Am. J. Physiol. Lung. Cell. Mol. Physiol.* **311(2)**, L192-207 (2016).

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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