

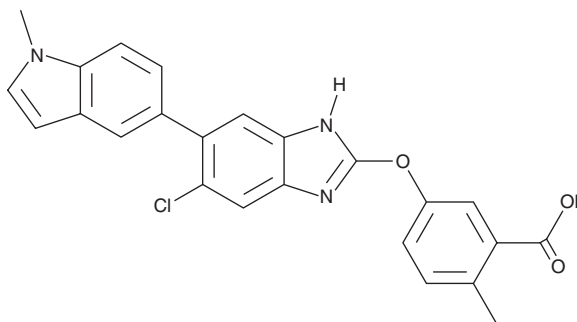
PRODUCT INFORMATION



EX-229

Item No. 34690

CAS Registry No.: 1219739-36-2
Formal Name: 5-[[6-chloro-5-(1-methyl-1H-indol-5-yl)-1H-benzimidazol-2-yl]oxy]-2-methyl-benzoic acid
Synonym: AMPK Activator 991
MF: C₂₄H₁₈ClN₃O₃
FW: 431.9
Purity: ≥98%
UV/Vis.: λ_{max}: 219, 235, 292 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

EX-229 is supplied as a solid. A stock solution may be made by dissolving the EX-229 in the solvent of choice, which should be purged with an inert gas. EX-229 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of EX-229 in these solvents is approximately 30 mg/ml.

EX-229 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, EX-229 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. EX-229 has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

EX-229 is an activator of AMP-activated protein kinase (AMPK).¹ It activates AMPK and increases glucose uptake in isolated rat epitrochlearis muscle when used at a concentration of 100 μM. EX-229 also increases AMPK activation and glucose uptake in primary skeletal muscle cultures isolated from patients with myalgic encephalomyelitis/chronic fatigue syndrome (ME/CFS).²

References

1. Lai, Y.-C., Kviklyte, S., Vertommen, D., *et al.* A small-molecule benzimidazole derivative that potently activates AMPK to increase glucose transport in skeletal muscle: Comparison with effects of contraction and other AMPK activators. *Biochem. J.* **460**(3), 363-375 (2014).
2. Brown, A.E., Dibnah, B., Fisher, E., *et al.* Pharmacological activation of AMPK and glucose uptake in cultured human skeletal muscle cells from patients with ME/CFS. *Biosci. Rep.* **38**(3), BSR20180242 (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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