

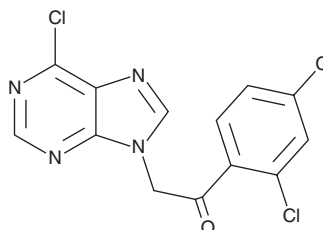
PRODUCT INFORMATION



ITH15004

Item No. 33667

CAS Registry No.: 2600675-12-3
Formal Name: 2-(6-chloro-9H-purin-9-yl)-1-(2,4-dichlorophenyl)-ethanone
MF: C₁₃H₇Cl₃N₄O
FW: 341.6
Purity: ≥98%
UV/Vis.: λ_{max}: 260 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

ITH15004 is supplied as a crystalline solid. A stock solution may be made by dissolving the ITH15004 in the solvent of choice, which should be purged with an inert gas. ITH15004 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of ITH15004 in these solvents is approximately 10 and 20 mg/ml, respectively.

ITH15004 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ITH15004 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. ITH15004 has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

ITH15004 is a non-nucleotide antagonist of the purinergic P2X₇ receptor (IC₅₀ = 9 μM in HEK293 cells expressing the human receptor).¹ It inhibits ATP-induced currents in *X. laevis* oocytes expressing the human P2X₇ receptor when used at a concentration of 100 μM. ITH15004 (1 μM) decreases IL-1β release from LPS-primed, ATP-stimulated isolated mouse peritoneal macrophages. It has high permeability in a parallel artificial membrane permeability assay (PAMPA).

Reference

1. Calzaferri, F., Narros-Fernández, P., de Pascual, R., *et al.* Synthesis and pharmacological evaluation of novel non-nucleotide purine derivatives as P2X₇ antagonists for the treatment of neuroinflammation. *J. Med. Chem.* **64**(4), 2272-2290 (2021).

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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