

# PRODUCT INFORMATION



**BAY-2416964**

Item No. 36939

**CAS Registry No.:** 2242464-44-2  
**Formal Name:** 6-(4-chlorophenyl)-2,3-dihydro-N-  
[[1S]-2-hydroxy-1-methylethyl]-2-  
(1-methyl-1H-pyrazol-4-yl)-3-oxo-  
4-pyridazinecarboxamide

**MF:** C<sub>18</sub>H<sub>18</sub>ClN<sub>5</sub>O<sub>3</sub>

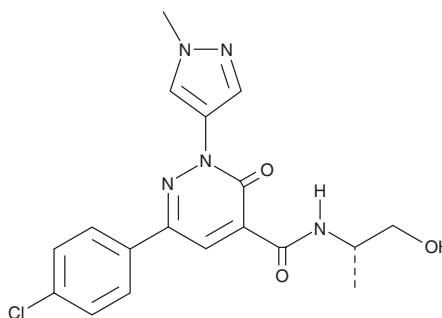
**FW:** 387.8

**Purity:** ≥98%

**Supplied as:** A 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

BAY-2416964 is supplied as a solid. A stock solution may be made by dissolving the BAY-2416964 in the solvent of choice, which should be purged with an inert gas. BAY-2416964 is soluble (≥10 mg/ml) in DMSO and slightly soluble (0.1-1 mg/ml) in ethanol.

## Description

BAY-2416964 is an antagonist of the aryl hydrocarbon receptor (AhR; IC<sub>50</sub> = 22 nM in U87 cells).<sup>1</sup> It decreases the mRNA expression of the AhR target genes *CYP1A1* and *AHRR* induced by the AhR agonist kynurenic acid (Item No. 16792) in LPS-stimulated isolated human monocytes when used at a concentration of 100 nM. BAY-2416964 (30-1,000 nM) increases CD3-, CD28-, and IL-2-induced IFN-γ production in isolated human naïve CD4<sup>+</sup> T cells. *In vivo*, BAY-2416964 (30 mg/kg, p.o.) reduces tumor volume, increases CD8<sup>+</sup> T cell and natural killer (NK) cell tumor infiltration, and decreases GR1<sup>+</sup> myeloid cell and CD206<sup>+</sup> M2 macrophage tumor infiltration in a B16/F10-OVA murine melanoma model.

## Reference

1. Kober, C., Roewe, J., Schmees, N., *et al.* Targeting the aryl hydrocarbon receptor (AhR) with BAY 2416964: A selective small molecule inhibitor for cancer immunotherapy. *J. Immunother. Cancer* **11(11)**, e007495 (2023).

### 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.

### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 03/15/2024

## CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897

[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM