

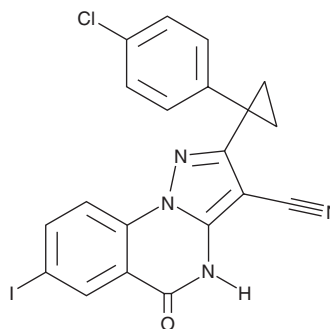
PRODUCT INFORMATION



Dynapyrazole-A

Item No. 45370

CAS Registry No.: 2226517-75-3
Formal Name: 2-[1-(4-chlorophenyl)cyclopropyl]-4,5-dihydro-7-iodo-5-oxo-pyrazolo[1,5-a]quinazoline-3-carbonitrile
MF: C₂₀H₁₂ClIN₄O
FW: 486.7
Purity: ≥95%
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

Dynapyrazole-A is supplied as a solid. A stock solution may be made by dissolving the dynapyrazole-A in the solvent of choice, which should be purged with an inert gas. Dynapyrazole-A is sparingly soluble (1-10 mg/ml) in DMSO.

Description

Dynapyrazole-A is an inhibitor of the motor proteins dynein 1 and dynein 2.¹ It inhibits the microtubule-stimulated ATPase activity of dynein but not its basal microtubule-independent activity. Dynapyrazole-A inhibits dynein 1- and dynein 2-mediated microtubule gliding in a cell-free assay (IC₅₀s = 2.3 and 2.6 μM, respectively). It also inhibits hedgehog pathway stimulation induced by SAG (Item No. 11914) in a reporter assay using NIH3T3 cells (IC₅₀ = 1.9 μM). Dynapyrazole-A (10 μM) reversibly reduces the speed of intraflagellar retrograde and, to a lesser extent, anterograde transport in mouse inner medullary collecting duct (mIMCD-3) cells. It also reduces lysosomal transport in catecholamine A-differentiated (CAD) cells.

Reference

1. Steinman, J.B., Santarossa, C.C., Miller, R.M., et al. Chemical structure-guided design of dynapyrazoles, cell-permeable dynein inhibitors with a unique mode of action. *Elife* **6**, e25174 (2017).

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, 04/06/2026

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