

# PRODUCT INFORMATION



## ILK-IN-2

Item No. 36674

**CAS Registry No.:** 1333146-24-9  
**Formal Name:** N-methyl-1-[4-(1-piperazinyl)phenyl]-5-[4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-1H-pyrazole-3-propanamide

**Synonyms:** CPD 22, Integrin-linked Kinase Inhibitor 1, OSU-T 315

**MF:** C<sub>30</sub>H<sub>30</sub>F<sub>3</sub>N<sub>5</sub>O

**FW:** 533.6

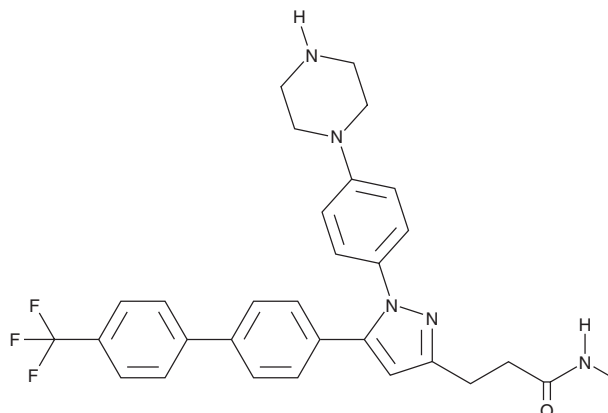
**Purity:** ≥98%

**UV/Vis.:** λ<sub>max</sub>: 269 nm

**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

ILK-IN-2 is supplied as a solid. A stock solution may be made by dissolving the ILK-IN-2 in the solvent of choice, which should be purged with an inert gas. ILK-IN-2 is soluble in the organic solvent DMSO at a concentration of approximately 10 mM.

### Description

ILK-IN-2 is an inhibitor of integrin-linked kinase (ILK; IC<sub>50</sub> = 0.6 μM).<sup>1</sup> It inhibits the phosphorylation of Akt, glycogen synthase kinase 3β (GSK3β), and myosin light-chain (MLC) in PC3 prostate and MDA-MB-231 breast cancer cells when used at concentrations ranging from 1 to 4 μM. ILK-IN-2 inhibits the proliferation of LNCaP, PC3, MDA-MB-231, MDA-MB-468, SK-BR-3, and MCF-7 cancer cells (IC<sub>50</sub>s = 1.6, 2, 1, 1.5, 1.8, and 2.5 μM, respectively), as well as induces autophagy and apoptosis in PC3 cells when used at a concentration of 2 μM. It also reduces protein levels of Y-box binding protein (YB-1), HER2, and EGFR in PC3 cells. ILK-IN-2 (25 and 50 mg/kg) reduces tumor growth in a PC3 mouse xenograft model.

### Reference

1. Lee, S.-L., Hsu, E.-C., Chou, C.-C., *et al.* Identification and characterization of a novel integrin-linked kinase inhibitor. *J. Med. Chem.* **54**(18), 6364-6374 (2011).

#### 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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#### 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