

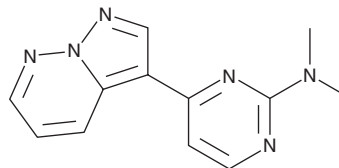
# PRODUCT INFORMATION



## DYRK1A Inhibitor Compound 11

Item No. 41715

**CAS Registry No.:** 2814486-79-6  
**Formal Name:** N,N-dimethyl-4-pyrazolo[1,5-b]pyridazin-3-yl-2-pyrimidinamine  
**Synonyms:** Dual-specificity Tyrosine Phosphorylation-regulated Kinase 1A Inhibitor Compound 11, DYRK1-IN-1, DYRK1 Inhibitor 1  
**MF:** C<sub>12</sub>H<sub>12</sub>N<sub>6</sub>  
**FW:** 240.3  
**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

DYRK1A inhibitor compound 11 is supplied as a solid. A stock solution may be made by dissolving the DYRK1A inhibitor compound 11 in the solvent of choice, which should be purged with an inert gas. DYRK1A inhibitor compound 11 is slightly soluble (0.1-1 mg/ml) in ethanol and DMSO.

### Description

DYRK1A inhibitor compound 11 is an inhibitor of dual-specificity tyrosine phosphorylation-regulated kinase 1A (DYRK1A; IC<sub>50</sub> = 0.4 nM).<sup>1</sup> It is selective for DYRK1A over DYRK2, CDC-like kinase 1 (Clk1), Clk2, Clk3, cyclin-dependent kinase 2 (Cdk2), and glycogen synthase kinase 3β (GSK3β; IC<sub>50</sub>s = 19, 7.1, 9.4, 54, 100, and 94 nM, respectively) but does inhibit DYRK1B (IC<sub>50</sub> = 2.7 nM). DYRK1A inhibitor compound 11 inhibits DYRK1A-induced increases in tau phosphorylation in a cell-based assay (IC<sub>50</sub> = 590 nM).

### Reference

1. Henderson, S.H., Sorrell, F., Bennett, J., *et al.* Discovery and characterization of selective and ligand-efficient DYRK inhibitors. *J. Med. Chem.* **64**(15), 11709-11728 (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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