

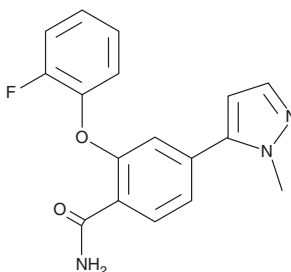
# PRODUCT INFORMATION



## RBPJ Inhibitor-1

Item No. 43358

**CAS Registry No.:** 2682114-39-0  
**Formal Name:** 2-(2-fluorophenoxy)-4-(1-methyl-1H-pyrazol-5-yl)-benzamide  
**Synonym:** RIN1  
**MF:** C<sub>17</sub>H<sub>14</sub>FN<sub>3</sub>O<sub>2</sub>  
**FW:** 311.3  
**Purity:** ≥98%  
**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

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

### Description

RBPJ inhibitor-1 is an inhibitor of recombination signal binding protein for immunoglobulin kappa J region (RBPJ; IC<sub>50</sub> = 0.18 μM in a reporter assay).<sup>1</sup> It also inhibits the protein-protein interaction between RBPJ and the neurogenic locus notch homolog protein 2 (Notch2) intracellular domain (NICD) and the protein-protein interaction between RBPJ and small histidine-alanine-rich protein (SHARP) in cell-free assays. RBPJ inhibitor-1 (15 μM) induces cell cycle arrest at the G<sub>2</sub>/M phase and apoptosis in UT-SCC-42B squamous cell carcinoma cells.<sup>2</sup> It reduces tumor volume in *D. rerio* larvae injected with UT-SCC-42B cells when administered in the tank water at a concentration of 5 μM.

### References

1. Hurtado, C., Safarova, A., Smith, M., *et al.* Disruption of NOTCH signaling by a small molecule inhibitor of the transcription factor RBPJ. *Sci. Rep.* **9**(1), 10811 (2019).
2. Czerwonka, A., Kalaftut, J., Wang, S., *et al.* Evaluation of the anticancer activity of RIN-1, a Notch signaling modulator, in head and neck squamous cell carcinoma. *Sci. Rep.* **13**(1), 13700 (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

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