

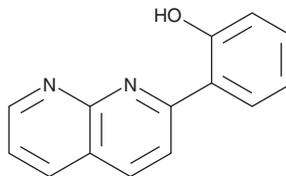
# PRODUCT INFORMATION



## 2-(1,8-Naphthyridin-2-yl)phenol

Item No. 30918

CAS Registry No.: 65182-56-1  
Synonym: 2-NP  
MF:  $C_{14}H_{10}N_2O$   
FW: 222.2  
Purity:  $\geq 98\%$   
UV/Vis.:  $\lambda_{max}$ : 215, 257, 359 nm  
Supplied as: A crystalline solid  
Storage:  $-20^{\circ}C$   
Stability:  $\geq 4$  years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

2-(1,8-Naphthyridin-2-yl)phenol (2-NP) is supplied as a crystalline solid. A stock solution may be made by dissolving the 2-NP in the solvent of choice, which should be purged with an inert gas. 2-NP is soluble in the organic solvent dimethyl formamide (DMF) at a concentration of approximately 10 mg/ml.

2-NP is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 2-NP should first be dissolved in DMF and then diluted with the aqueous buffer of choice. 2-NP has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

2-NP is an enhancer of STAT1 activity.<sup>1</sup> It enhances IFN- $\gamma$ -induced STAT1-dependent signaling, but not IFN- $\gamma$ -induced STAT3-dependent signaling or TNF- $\alpha$ -induced NF- $\kappa$ B-dependent signaling in cell-based reporter assays when used at a concentration of 45  $\mu$ M. 2-NP (45  $\mu$ M) increases IFN- $\gamma$ -induced expression of the STAT1 target gene *IRF3* and STAT1 phosphorylation in NIH3T3 cells. It increases growth inhibition of MCF-7 and 2fTGH cancer cells induced by IFN- $\gamma$  at the same concentration.

### Reference

1. Lynch, R.A., Etchin, J., Battle, T.E., *et al.* A small-molecule enhancer of signal transducer and activator of transcription 1 transcriptional activity accentuates the antiproliferative effects of IFN- $\gamma$  in human cancer cells. *Cancer Res.* **67**(3), 1254-1261 (2007).

#### 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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