# **PRODUCT** INFORMATION



## Indiplon

Item No. 11638

CAS Registry No.: Formal Name:	325715-02-4 N-methyl-N-[3-[3-(2-thienylcarbonyl) pyrazolo[1,5-a]pyrimidin-7-yl] phenyl]-acetamide	O N
Synonym:	NBI 34060	
MF:	$C_{20}H_{16}N_4O_2S$	Ň N
FW:	376.4	Ĭ
Purity:	≥95%	
UV/Vis.:	λ <sub>mav</sub> : 230, 312, 347 nm	
Supplied as:	A crystalline solid	
Storage:	-20°C	~ N `
Stability:	≥4 years	I

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

#### Laboratory Procedures

Indiplon is supplied as a crystalline solid. A stock solution may be made by dissolving the indiplon in the solvent of choice. Indiplon is soluble in organic solvents such as DMSO and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of indiplon in these solvents is approximately 14 and 25 mg/ml, respectively.

Indiplon is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, indiplon should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Indiplon 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

 $\gamma$ -Aminobutyric acid (GABA) is an important inhibitory neurotransmitter in mammals.<sup>1</sup> Indiplon is a pyrazolopyrimidine that acts as a high-affinity positive allosteric modulator of the GABAA receptor, potentiating GABA-activated chloride currents in a dose-dependent and reversible manner.<sup>2,3</sup> Indiplon is selective for  $\alpha_1$  subunits (EC<sub>50</sub> = 2.6 nM) as compared with  $\alpha_2$ ,  $\alpha_3$ , or  $\alpha_5$  (EC<sub>50</sub> = 24, 60, and 77 nM).<sup>2,3</sup> Through this action, indiplon has sedative and hypnotic effects that can improve sleep onset, maintenance, and duration.4,5

#### References

- 1. Malcangio, M. and Bowery, N.G. Trends Pharmacol. Sci. 17, 457-462 (1996).
- 2. Petroski, R.E., Pomeroy, J.E., Das, R., et al. J. Pharmacol. Exp. Ther. 317(1), 369-377 (2006).
- 3. Sullivan, S.K., Petroski, R.E., Verge, G., et al. J. Pharmacol. Exp. Ther. 311(2), 537-546 (2004).
- 4. Foster, A.C., Pelleymounter, M.A., Cullen, M.J., et al. J. Pharmacol. Exp. Ther. 311(2), 547-559 (2004).
- 5. Scharf, M.B., Black, J., Hull, S., et al. Sleep 30(6), 743-752 (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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