# **PRODUCT** INFORMATION



PD 90780 (hydrate)

Item No. 29488

Formal Name:	7-(benzoylamino)-4,9-dihydro- 4-methyl-9-oxo-pyrazolo[5,1-b] quinazoline-2-carboxylic acid, hydrate	Н О
MF:	$C_{19}H_{14}N_4O_4 \bullet XH_2O$	N N OH
FW:	362.3	ö II - I - V
Purity:	≥98%	N O
UV/Vis.:	λ <sub>max</sub> : 236, 287, 312 nm	
Supplied as:	A crystalline solid	
Storage:	-20°C	• XH <sub>2</sub> O
Stability:	≥4 years	
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.		

## Laboratory Procedures

PD 90780 (hydrate) is supplied as a crystalline solid. A stock solution may be made by dissolving the PD 90780 (hydrate) in the solvent of choice, which should be purged with an inert gas. PD 90780 (hydrate) is soluble in the organic solvent DMSO at a concentration of approximately 36 mg/ml.

## Description

PD 90780 is an inhibitor of the interaction between NGF and the p75 NGF receptor (NGFR).<sup>1</sup> It binds to NGF (K<sub>D</sub> = 25.83  $\mu$ M) and inhibits NGF binding to the extracellular domain of p75 NGFR (IC<sub>50</sub> = 220 nM), as well as to Q1-CHO cells expressing full-length human p75 NGFR ( $IC_{50}$  = 300 nM).<sup>1,2</sup> PD 90780 inhibits NGF-dependent differentiation of PC12 cells (IC<sub>50</sub> = 33.22  $\mu$ M).<sup>2</sup>

## References

- 1. Spiegel, K., Agrafiotis, D., Caprathe, B., et al. PD 90780, a non peptide inhibitor of nerve growth factor's binding to the P75 NGF receptor. Biochem. Biophys. Res. Commun. 217(2), 488-494 (1995).
- 2. Kennedy, A.E., Laamanen, C.A., Ross, M.S., et al. Nerve growth factor inhibitor with novel-binding domain demonstrates nanomolar efficacy in both cell-based and cell-free assay systems. Pharmacol. Res. Perspect. 5(5), e00339 (2017).

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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