

## Catalog # 10-5034 Brigatinib

CAS# 1197953-54-0

5-Chloro-N<sup>4</sup>-[2-(dimethylphosphinyl)phenyl]-N<sup>2</sup>-[2-methoxy-4-[4-(4-methyl-1-piperazinyl)-1-piperidinyl]phenyl]-2,4-pyrimidinediamine; AP26113

Lot # X109661

A potent and selective pan-ALK inhibitor (IC<sub>50</sub>=0.6 nM).<sup>1</sup> Cells with ALK mutation L1196Q<sup>2</sup> and the double mutation I1171S + G1269<sup>3</sup> remain sensitive to brigatinib. Clinically useful in non-small cell lung cancer.<sup>4</sup>

- 1) Zhang et al. (2016), The potent ALK Inhibitor Brigatinib (AP26113) Overcomes Mechanisms of Resistance to First- and Second-Generation ALK Inhibitors in Preclinical Models; Clin. Cancer Res., **22** 5527
- Ceccon et al. (2013), Crizotinib-resistant NPM-ALK mutants confer differential sensitivity to unrelated Alk inhibitors; Mol. Cancer Res., 11 122
- 3) Takahashi et al. (2020), Overcoming resistance by ALK compound mutation (I1171S + G1269A) after sequential treatment of multiple ALK inhibitors in non-small cell lung cancer, Thorac. Cancer, 11 581
- 4) Pinto et al. (2020), Clinical consequences of resistance to ALK inhibitors in non-small cell lung cancer, Respir. Med., 14 385

## **PHYSICAL DATA**

Molecular Weight: 584.02

Molecular Formula:  $C_{29}H_{39}CIN_7O_2P$ Purity: 98% by HPLC

NMR: (Conforms)

Solubility: DMSO (up to 1 mg/ml with warming)

Physical Description: White or off-white solid

Storage and Stability: Store as supplied desiccated at -20°C for up to 2 years from the date of purchase.

Solutions in DMSO may be stored at -20°C for up to 1 month.

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