# **PRODUCT** INFORMATION



## PD 153035 (hydrochloride)

Item No. 14879

| CAS Registry No.: | 183322-45-4                            |         |
|-------------------|--|---------|
| Formal Name:      | N-(3-bromophenyl)-6,7-dimethoxy-4-     |         |
|                   | quinazolinamine, monohydrochloride     |         |
| Synonym:          | AG-1517                                | н, /, / |
| MF:               | $C_{16}H_{14}BrN_{3}O_{2} \bullet HCI$ | N Br    |
| FW:               | 396.7                                  |         |
| Purity:           | ≥98%                                   | • HCI   |
| UV/Vis.:          | λ <sub>max</sub> : 221, 255, 346 nm    |         |
| Supplied as:      | A crystalline solid                    |         |
| Storage:          | -20°C                                  | O V N   |
| Stability:        | ≥4 years                               |         |

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

#### Laboratory Procedures

PD 153035 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the PD 153035 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. PD 153035 (hydrochloride) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of PD 153035 (hydrochloride) in these solvents is approximately 0.25 and 0.16 mg/ml, respectively.

PD 153035 (hydrochloride) is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

#### Description

Overactivity of the epidermal growth factor receptor-associated tyrosine kinase (EGFR) has been associated with cancer development and progression, including cell proliferation, apoptosis, angiogenesis, and metastatic spread.<sup>1</sup> PD 153035 is a highly potent, reversible inhibitor of the EGFR ( $K_i$  = 5.2 pM; IC<sub>50</sub> = 29 pM).<sup>2</sup> It has been shown to rapidly suppress autophosphorylation of EGFR in fibroblasts and human epidermoid carcinoma cells, as well as to selectively block EGF-mediated cellular processes, including mitogenesis and early gene expression.<sup>3,4</sup>

#### References

- 1. Ciardiello, F. and Tortora, G. A novel approach in the treatment of cancer: Targeting the epidermal growth factor receptor. Clin. Cancer Res. 7, 2958-2970 (2001).
- 2. Fry, D.W., Kraker, A.J., McMichael, A., et al. A specific inhibitor of the epidermal growth factor receptor tyrosine kinase. Science 265(5175), 1093-1095 (1994).
- 3. Bos, M., Mendelsohn, J., Kim, Y.-M., et al. PD153035, a tyrosine kinase inhibitor, prevents epidermal growth factor receptor activation and inhibits growth of cancer cells in a receptor number-dependent manner. Clin. Cancer Res. 3(11), 2099-2106 (1997).
- 4. Rae, J.M. and Lippman, M.E. Evaluation of novel epidermal growth factor receptor tyrosine kinase inhibitors. Breast Cancer Res. Treat. 83(2), 99-107 (2004).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFFTY 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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/03/2022

### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897 [734] 971-3335 FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.CAYMANCHEM.COM