

## Product Data Sheet

Product Name: AZ-23 (AZ23)

Cat. No.: GC33090

### Chemical Properties

Cas. No. 915720-21-7

SMILES CC(OC1=CC(NC2=NC(N[C@H](C3=NC=C(F)C=C3)C)=NC=C2Cl)=NN1)C

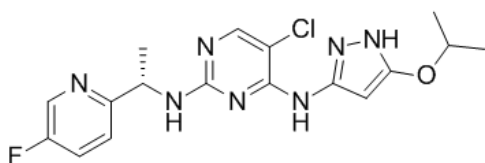
Formula  $C_{17}H_{19}ClFN_7O$  M.Wt 391.83

Solubility DMSO : 125 mg/mL (319.02 mM) Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure



### Protocol

**Cell experiment:** Exponentially growing TF-1 cells are treated with various concentrations of AZ-23 and then incubated for an additional 72 h at 37°C in either growth or basal medium plus 100 ng/mL NGF. Cell proliferation is measured using MTS solution[1].

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

## Product Data Sheet

---

**Animal experiment:** Mice[1] Tumor-bearing mice are given a single, oral dose of compound and individual mice are sacrificed at various time points postdose (2, 6, 16, or 24 hours). Tumors are excised and homogenized and the resulting tumor lysates are analyzed using an ELISA for pTrkA[1].

### References:

[1]. Thress K, et al. Identification and preclinical characterization of AZ-23, a novel, selective, and orally bioavailable inhibitor of the Trk kinase pathway. Mol Cancer Ther. 2009 Jul; 8(7):1818-27.

### Background

AZ-23 is an ATP-competitive and orally bioavailable Trk kinase A/B/C inhibitor with IC50s of 2 nM (TrkA), 8 nM (TrkB), 24 nM (FGFR1), 52 nM (Flt3), 55 nM (Ret), 84 nM (MuSk), 99 nM (Lck), respectively.

AZ-23 potently and selectively inhibits Trk phosphorylation in cells. AZ-23 potently inhibits Trk-mediated survival (EC50 of 2 nM). AZ-23 Inhibits Trk-Dependent Survival in MCF10ATrkA- $\delta$  and TF-1 Cell Lines[1].

AZ-23 shows in vivo TrkA kinase inhibition and efficacy in mice following oral administration in a TrkA-driven allograft model and significant tumor growth inhibition in a Trk-expressing xenograft model of neuroblastoma[1].

[1]. Thress K, et al. Identification and preclinical characterization of AZ-23, a novel, selective, and orally bioavailable inhibitor of the Trk kinase pathway. Mol Cancer Ther. 2009 Jul; 8(7):1818-27.

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA