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**Product Data Sheet**

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Product Name: OTS514 hydrochloride

Cat. No.: GC25691

**Chemical Properties**

Cas. No. 2319647-76-0

Formula C<sub>21</sub>H<sub>20</sub>N<sub>2</sub>O<sub>2</sub>S.HCl

M.Wt 400.92

Solubility DMSO: 80 mg/mL (199.54 mM);Water: 80 mg/mL (199.54 mM);Ethanol: 5 mg/mL (12.47 mM)

Store  
Storage 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 **Background**

OTS514 is a highly potent TOPK(T-LAK cell-originated protein kinase) inhibitor with an IC<sub>50</sub> value of 2.6 nM. OTS514 induces cell cycle arrest and apoptosis.

OTS514 has growth inhibitory effect on five kidney cancer cell lines, VMRC-RCW, Caki-1, Caki-2, 769-P and 786-O, in which TOPK was highly expressed. The IC<sub>50</sub> values range from 19.9 to 44.1 nM[1]. OTS514 strongly suppressed the growth of TOPK-positive cancer cells. It also shows significant growth-inhibitory effect on ovarian cancer cell lines with IC<sub>50</sub> values of 3.0 to 46 nM[3].

Mouse xenograft studies with human lung cancer cells demonstrated the in vivo efficacy of OTS514 but found that the compound also caused severe hematopoietic toxicity [reduction of red blood cells (RBCs) and white blood cells (WBCs) associated with marked increase in platelets][2]. Oral administration of OTS514 significantly elongated overall survival in the ES-2 abdominal dissemination xenograft model, compared with vehicle control (P < 0.001)[3].

[1] Kato T, et al. Oncotarget. 2016, 7(14):17652-64. [2] Matsuo Y, et al. Sci Transl Med.

**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

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2014, 6(259):259ra145. [3] Ikeda Y, et al. Clin Cancer Res. 2016, 22(24):6110-6117.

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