LKT Laboratories, Inc.

Lomeguatrib

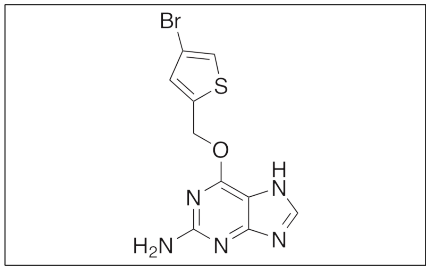
Phone: 888-558-5227
651-644-8424
Fax: 888-558-7329
Email: getinfo@lktlabs.com
Web: lktlabs.com

Product Information

Product ID L5750
CAS No. 192441-08-0
Chemical Name

Synonym

Formula $C_{10}H_8BrN_5OS$
Formula Wt. 326.17
Melting Point
Purity ≥98%
Solubility



Bulk quanitites available upon request

Product ID	Size
L5750	10 mg
L5750	25 mg
L5750	100 mg

Store Temp Ambient
Ship Temp Ambient

Description Lomeguatrib is an anticancer chemotherapeutic compound that is used as a pseudosubstrate for *O6*-methylguanine-DNA methyltransferase (MGMT), inactivating the enzyme and inhibiting DNA repair across many cancer cell lines. Lomeguatrib is currently in clinical trials as a co-administered compound that increases the efficacy of chemotherapeutics such as temozolomide and dacarbazine in the treatment of melanoma and other solid tumors. In glioblastoma cells, lomeguatrib decreases activity of MGMT and increases expression of p53, inducing DNA fragmentation and apoptosis.

References

Taspinar M, Ilgaz S, Ozdemir M, et al. Effect of lomeguatrib-temozolomide combination on MGMT promoter methylation and expression in primary glioblastoma tumor cells. Tumour Biol. 2013 Jun;34(3):1935-47. PMID: 23519841.

Tawbi HA, Villaruz L, Tarhini A, et al. Inhibition of DNA repair with MGMT pseudosubstrates: phase I study of lomeguatrib in combination with dacarbazine in patients with advanced melanoma and other solid tumours. Br J Cancer. 2011 Sep 6;105(6):773-7. PMID: 21811257.

Watson AJ, Sabharwal A, Thorncroft M, et al. Tumor O(6)-methylguanine-DNA methyltransferase inactivation by oral lomeguatrib. Clin Cancer Res. 2010 Jan 15;16(2):743-9. PMID: 20068091.

Watson AJ, Middleton MR, McGown G, et al. O(6)-methylguanine-DNA methyltransferase depletion and DNA damage in patients with melanoma treated with temozolomide alone or with lomeguatrib. Br J Cancer. 2009 Apr 21;100(8):1250-6. PMID: 19367283.

Khan O, Middleton MR. The therapeutic potential of O6-alkylguanine DNA alkyltransferase inhibitors. Expert Opin Investig Drugs. 2007 Oct;16(10):1573-84. PMID: 17922622.