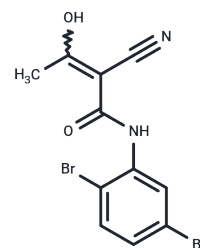


LFM-A13

## Chemical Properties

CAS No. : 62004-35-7  
Formula: C<sub>11</sub>H<sub>8</sub>Br<sub>2</sub>N<sub>2</sub>O<sub>2</sub>  
Molecular Weight: 360  
Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year  
*Actual storage temperature shall be subject to the COA.*



## Biological Description

Description	LFM-A13 is a highly selective inhibitor of the non-receptor tyrosine kinase BTK (Bruton's tyrosine kinase) (IC <sub>50</sub> = 2.5 μM). It irreversibly severs the downstream signaling network of the B-cell receptor (BCR) by targeted binding to the BTK kinase catalytic domain, exhibiting excellent anti-leukemic and immunomodulatory effects in models of acute/chronic lymphocytic leukemia and severe autoimmune diseases.
Targets(IC <sub>50</sub> )	BTK
In vitro	LFM-A13 (100 uM) inhibits Epo-induced phosphorylation of JAK2, BTK, STAT5, and ERK1/2 [1][2].
In vivo	LFM-A13 (10-100 mg/kg) exerts dose-dependent antitumor effects in breast cancer mouse models [3][4].

## Solubility Information

Solubility	DMSO: 80.00 mg/mL (222.22 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

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	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	2.7778 mL	13.8889 mL	27.7778 mL
5 mM	0.5556 mL	2.7778 mL	5.5556 mL
10 mM	0.2778 mL	1.3889 mL	2.7778 mL
50 mM	0.0556 mL	0.2778 mL	0.5556 mL

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Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Lu Y, et al. Acetylcarnitine Is a Candidate Diagnostic and Prognostic Biomarker of Hepatocellular Carcinoma. Cancer Res. 2016 May 15;76(10):2912-20.

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