

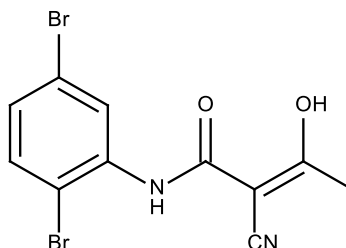
Catalog # 10-1032

LFM-A13

CAS# 244240-24-2

(2Z)-2-Cyano-N-(2,5-dibromophenyl)-3-hydroxy-2-butenamide

Lot # X101197



LFM-A13 is a selective inhibitor of Bruton's tyrosine kinase (BTK) – IC₅₀'s = 2.5 μM (recombinant BTK) and 17.2 μM (human BTK).^{1,2} It has also been shown to inhibit Polo-like kinase (PLK) – IC₅₀ = 61 μM for human PLK3.³ It displayed no activity (concentrations up to 278 μM) at JAK1, JAK3, HCK, EGFRK and IRK² or CDK1-3, CHK1, IKK, MAPK1, SAPK2a and ten tyrosine kinases³.

- 1) Vassilev *et al.* (1999), *Bruton's tyrosine kinase as an inhibitor of the Fas/CD95 death-inducing signaling complex*; J.Biol.Chem., **274** 1646.
- 2) Mahajan *et al.* (1999), *Rational design and synthesis of a novel-anti-leukemic agent targeting Bruton's tyrosine kinase (BTK), LFM-A13 [α -cyano- β -hydroxy- β -methyl-N-(2,5-dibromophenyl)propenamide]*. J.Biol.Chem. **274** 9587
- 3) Uckun *et al.* (2007) *Anti-breast cancer activity of LFM-A13, a potent inhibitor of polo-like kinase (PLK)*. Bioorg.Med.Chem. **15** 800

PHYSICAL DATA

Molecular Weight:	360.00
Molecular Formula:	C ₁₁ H ₈ Br ₂ N ₂ O ₂
Purity:	>98% by TLC
	NMR: Conforms
Solubility:	DMSO (up to 15 mg/ml); Ethanol (up to 15 mg/mL)
Physical Description:	White solid
Storage and Stability:	Store as supplied at -20°C for up to 2 years from the date of purchase. Protect from exposure to moisture. Solutions in DMSO and ethanol may be stored at -20°C for up to 3 months.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.