

WWW.PROBECHEM.COM

Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	Micheliolide
Cat. No.	:	PC-23535
CAS No.	:	68370-47-8
Molecular Formula	:	C ₁₅ H ₂₀ O ₃
Molecular Weight	:	248.32
Target	:	Pyruvate Kinase
Solubility	:	10 mM in DMSO



Biological Activity

Micheliolide (MCL) is a potent, selective and allosteric activator of PKM2, selectively activates pyruvate kinase M2 (PKM2) through the covalent binding at Cys424, effectively promotes the pyruvate kinase activity of rPKM2 with AC50 of 6 nM, shows broad-spectrum anticancer and anti-inflammation activity.

Micheliolide (MCL) selectively inhibits acute myelogenous leukemia stem and progenitor cells.

Micheliolide (MCL) inhibited NF-κB activation and subsequent pro-inflammatory pathways activation in vitro and in vivo. Micheliolide inhibits LPS-induced inflammatory response and protects mice from LPS challenge.

Micheliolide provides protection of mice against Staphylococcus aureus and MRSA infection by down-regulating inflammatory response.

References

Zhang Q, et al. J Med Chem. 2012 Oct 25;55(20):8757-69.

Li J, et al. J Med Chem. 2018 May 10;61(9):4155-4164.

Jiang X, et al. Sci Rep. 2017 Feb 6;7:41964.

Viennois E, et al. Lab Invest. 2014 Sep;94(9):950-65.

Caution: Product has not been fully validated for medical applications. Lab Use Only! E-mail: tech@probechem.com