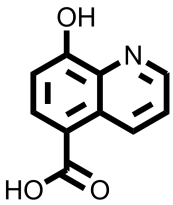
Xcess Biosciences Inc.
7144 N Harlem Ave #169
Chicago, IL 60631 USA

http://www.xcessbio.com
Toll free: 1-866-706-2330
Fax: 1-619- 810-0718
Email: info@xcessbio.com

2OG Oxygenases Inhibitor – IOX1

Chemical Name: 8-hydroxyquinoline-5-carboxylic acid



Molecular Weight:	189.17
Formula:	$C_{10}H_7NO_3$
Purity:	≥98%
CAS#:	5852-78-8
Solubility:	DMSO up to 100 mM
Storage	Powder: 4 °C 1 year DMSO: 4 °C 3 months -20 °C 1 year

Biological Activity:

IOX1 is a cell-permeable broad-spectrum inhibitor of most 2OG oxygenases. It inhibits histone demethylase JMJD3, JMJD1A, JMJD2A, JMJD2E, JMJD2C and UTX with IC_{50} at 0.12, 0.17, 0.2, 0.3, 0.6 and 1 μM respectively. IOX1 inhibits JMJD2A-mediated H3K9me3 demethylation in HeLa cells.

How to Use:

In vitro: IOX1 was used at 10-300 μM final concentration in various in vitro assays.

In vivo: n/a

Reference:

1. King ON, et al. Quantitative high-throughput screening identifies 8-hydroxyquinolines as cell-active histone demethylase inhibitors. (2010) PLoS One. 5(11):e15535.
2. Schiller R, et al. A cell-permeable ester derivative of the JmjC histone demethylase inhibitor IOX1. (2014) ChemMedChem. 9(3):566-71.
3. http:// http://www.thesgc.org/chemical-probes/IOX1