DMOG



Catalog No: 14062, 14063

Format: 50 mg, 10 mg

Chemical Properties:

MW = 175.1 $C_6H_9NO_5$

CAS 89464-63-1

Physical Properties: White to off-white solid; MP = 46-48°C **Names:** DMOG, N-(2-Methyoxy-2-oxoacetyl)glycine methyl ester;

Dimethyloxalylglycine

Pharmacology: Inhibits PHD or prolyl hydroxylase domain-containing proteins, activating HIF1 α (ref 1,2) and inhibiting JMJD2A (IC₅₀ = 2.5 M) (ref 3). Displays neuroprotective effects. Inhibits neuronal cell death caused by neurotrophin deprivation (ref 4). Prevents activation of the ATR/CHK1/p53 pathway and suppresses apoptosis induced by DNA damage (ref 5).

Solubilization: May be dissolved in DMSO (30 mg/ml); Ethanol (25 mg/ml);

Water (30 mg/ml)

Fluorescent Properties: N/A

Quality Control:

>98% (TLC); NMR (Conforms)

References:

1. TM Asikainen et al. Proc. Natl. Acad. Sci. USA 2005, 102:10212

2. P Jaakkola et al. Science 2001, 292:468

3. S Hamada et al. Bioorg. Med. Chem. Lett. 2009, 19:2852

4. DJ Lomb et al. Mol. Pharmacol. 2009, 75:1198

5. L Xie et al. Clin. Invest. 2012, 122:2827

Storage and Guarantee: Store desiccated as supplied at -20°C for up to 2 years. Store solutions at -20°C for up to 1 month. This product is guaranteed for 6 months from date of arrival.