

**Product Name: Imidazole Ketone Erastin***Item No.: MED26116*Purity Specification:  $\geq 98\%$ Molecular Formula : C<sub>35</sub>H<sub>35</sub>ClN<sub>6</sub>O<sub>5</sub>

CAS Number: 1801530-11-9      Formula Weight : 655.142      Storage:-20°C

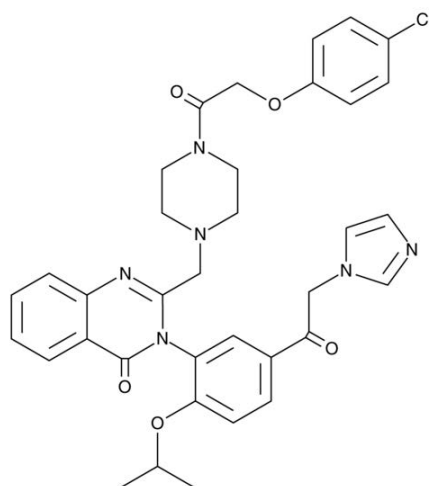
**DESCRIPTION**

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Imidazole ketone erastin is supplied as a crystalline solid. A stock solution may be made by dissolving the imidazole ketone erastin in the solvent of choice. Imidazole ketone erastin is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of imidazole ketone erastin in these solvents is approximately 1 and 10 mg/ml, respectively.

Imidazole ketone erastin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, imidazole ketone erastin should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Imidazole ketone erastin has a solubility of approximately 0.25 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Imidazole ketone erastin is an inducer of ferroptosis. It inhibits glutamate release in human CCF-STTG1 astrocytoma cells (IC<sub>50</sub> = 30 nM), indicating inhibition of the system xc- cystine/glutamate transporter. Imidazole ketone erastin increases production of lipid reactive oxygen species (ROS) in SUDHL6 diffuse large B cell lymphoma (DLBCL) cells in a concentration-dependent manner, as well as reduces glutathione (GSH) levels in these cells (IC<sub>50</sub> = 34 nM). It inhibits the growth of HT-1080 fibrosarcoma cells (GI<sub>50</sub> = 310 nM) as well as HRASG12V-overexpressing BJelR cells (IC<sub>50</sub> = 3 nM). Imidazole ketone erastin (23 and 40 mg/kg) reduces tumor growth in an SUDHL6 mouse xenograft model.

**Structure :**



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Conclusion: This batch of products conform the quality inspection standard of the manufacturer