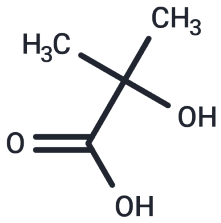
# Data Sheet (Cat.No.T4787)

TargetMol

## 2-Hydroxyisobutyric acid

### Chemical Properties




CAS No. : 594-61-6

Formula: C4H8O3

Molecular Weight: 104.1

Appearance: no data available

Storage: Pure form: -20°C for 3 years | In solvent: -80°C for 1 year

### Biological Description

| | |
|---|---|
| Description | 2-Hydroxyisobutyric acid (α-Hydroxyisobutyric acid) is a metabolite of methyl tert-butyl ether (MTBE). MTBE may be obtained through environmental exposure. MTBE is rapidly eliminated from the body, mainly through expired air as the unchanged compound. MTBE is to some extent metabolised to t-butyl alcohol (TBA) and formaldehyde and oxidised to 2-methyl-1,2-propanediol and a-hydroxy isobuturic acid. 2-Hydroxyisobutyric acid has been used as an arial bactericide. |
| Targets(IC50) | Endogenous Metabolite |
| In vivo | Glycerol can induce acute renal failure in rat models. Acute renal failure induced by glycerol or uranyl nitrate reduces the hepato-biliary transport of some drugs, modulates the distribution of drugs into the central nervous system and affects the activity of various hepatic microsomal enzymes. |

### Solubility Information

| | |
|---|---|
| Solubility | DMSO: 50 mg/mL (480.31 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 9.6061 mL | 48.0307 mL | 96.0615 mL |
| 5 mM | 1.9212 mL | 9.6061 mL | 19.2123 mL |
| 10 mM | 0.9606 mL | 4.8031 mL | 9.6061 mL |
| 50 mM | 0.1921 mL | 0.9606 mL | 1.9212 mL |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Guneral F , , Bachmann C , . Age-related reference values for urinary organic acids in a healthy Turkish pediatric population[J]. Clinical Chemistry, 1994, 40(6):862-6.



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