

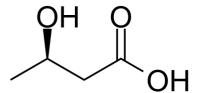


# **Data Sheet**

**Product Name:** (R)-3-Hydroxybutanoic acid

Cat. No.: CS-0044101
CAS No.: 625-72-9
Molecular Formula: C4H8O3
Molecular Weight: 104.10

Target:Endogenous MetabolitePathway:Metabolic Enzyme/ProteaseSolubility:H2O: ≥ 25 mg/mL (240.15 mM)



## **BIOLOGICAL ACTIVITY:**

(R)-3-Hydroxybutanoic acid is a metabolite, and converted from acetoacetic acid catalyzed by 3-hydroxybutyrate dehydrogenase. **In Vitro**: (R)-3-Hydroxybutanoic acid (D-3-Hydroxybutyric acid) is a metabolite, and converted from acetoacetic acid. Enhanced hepatic fatty acid oxidation results in the increased production of acetoacetic acid which is in turn converted to (R)-3-Hydroxybutanoic acid by a reaction catalyzed by 3-hydroxybutyrate dehydrogenase<sup>[1]</sup>.

### References:

[1]. Ide T. Enzymatic-HPLC method to analyze D-3-hydroxybutyric acid in rat serum. Biosci Biotechnol Biochem. 2010;74(8):1578-82.

#### **CAIndexNames**:

Butanoic acid, 3-hydroxy-, (3R)-

### **SMILES:**

C[C@@H](O)CC(O)=O

Caution: Product has not been fully validated for medical applications. For research use only.

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