

## Kojibiose

## Chemical Properties

|                   |                                                                        |
|-------------------|------------------------------------------------------------------------|
| CAS No.:          | 2140-29-6                                                              |
| Formula:          | C <sub>12</sub> H <sub>22</sub> O <sub>11</sub>                        |
| Molecular Weight: | 342.3                                                                  |
| Appearance:       | N/A                                                                    |
| Storage:          | 0-4°C for short term (days to weeks), or -20°C for long term (months). |

## Biological Description

|             |                                                                                                        |
|-------------|--------------------------------------------------------------------------------------------------------|
| Description | Kojibiose, a disaccharide, is a product of the caramelization of glucose. It is also present in honey. |
|-------------|--------------------------------------------------------------------------------------------------------|

## Solubility Information

|            |                                                                                   |
|------------|-----------------------------------------------------------------------------------|
| Solubility | DMSO: Soluble<br>( < 1 mg/ml refers to the product slightly soluble or insoluble) |
|------------|-----------------------------------------------------------------------------------|

## Preparing Stock Solutions

|       | 1mg      | 5mg       | 10mg      |
|-------|----------|-----------|-----------|
| 1 mM  | 2.921 mL | 14.607 mL | 29.214 mL |
| 5 mM  | 0.584 mL | 2.921 mL  | 5.843 mL  |
| 10 mM | 0.292 mL | 1.461 mL  | 2.921 mL  |
| 50 mM | 0.058 mL | 0.292 mL  | 0.584 mL  |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

## Reference

1. Jung JH, Seo DH, Holden JF, Park CS. Identification and characterization of an archaeal kojibiose catabolic pathway in the hyperthermophilic *Pyrococcus* sp. strain ST04. *J Bacteriol.* 2014 Mar;196(5):1122-31. doi: 10.1128/JB.01222-13. Epub 2014 Jan 3. PubMed PMID: 24391053; PubMed Central PMCID: PMC3957703.
2. Okada S, Yamamoto T, Watanabe H, Nishimoto T, Chaen H, Fukuda S, Wakagi T, Fushinobu S. Structural and mutational analysis of substrate recognition in kojibiose phosphorylase. *FEBS J.* 2014 Feb;281(3):778-86. doi: 10.1111/febs.12622. Epub 2013 Dec 12. PubMed PMID: 24255995.
3. Moisés Laparra J, Díez-Municio M, Javier Moreno F, Herrero M. Kojibiose ameliorates arachidic acid-induced metabolic alterations in hyperglycaemic rats. *Br J Nutr.* 2015 Nov 14;114(9):1395-402. doi: 10.1017/S0007114515003153. Epub 2015 Sep 7. PubMed PMID: 26344377.
4. Yamamoto T, Nishio-Kosaka M, Izawa S, Aga H, Nishimoto T, Chaen H, Fukuda S. Enzymatic properties of recombinant kojibiose phosphorylase from *Caldicellulosiruptor saccharolyticus* ATCC43494. *Biosci Biotechnol Biochem.* 2011;75(6):1208-10. Epub 2011 Jun 13. PubMed PMID: 21670511.

Inhibitors · Natural Compounds · Compound Libraries

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use.

Tel:781-999-4286

E-mail:[info@targetmol.com](mailto:info@targetmol.com)

Address:36 Washington Street,Wellesley Hills,MA 02481