



碧云天生物技术/Beyotime Biotechnology
订货热线: 400-168-3301或800-8283301
订货e-mail: order@beyotime.com
技术咨询: info@beyotime.com
网址: http://www.beyotime.com

Choline Kinase (Crude Enzyme)

产品编号	产品名称	包装
P3676-100ml	Choline Kinase (Crude Enzyme)	100ml
P3676-1L	Choline Kinase (Crude Enzyme)	1L

产品简介:

- Choline Kinase, 中文名为胆碱激酶, 以三磷酸腺苷(ATP)作为磷酸的供体, 催化胆碱发生磷酸化。本产品为大肠杆菌表达的胆碱激酶, 并经简单纯化获得的可以确保达到一定酶活力的粗酶液。
- 由于本产品需新鲜制备, 确认订购后约6个工作日才可以发货。个别情况首次制备出现问题, 发货时间会顺延。
- 本产品可以提供十公斤、百公斤乃至吨级的粗酶液, 如有需求请联系碧云天。
- Choline kinase (also known as CK, ChoK and choline phosphokinase) is an enzyme which catalyzes the first reaction in the choline pathway for phosphatidylcholine (PC) biosynthesis. This reaction involves the transfer of a phosphate group from adenosine triphosphate (ATP) to choline in order to form phosphocholine. Thus, the two substrates of this enzyme are ATP and choline, whereas its two products are adenosine diphosphate (ADP) and O-phosphocholine. Choline kinase requires magnesium ions (+2) as a cofactor for this reaction. This enzyme belongs to the family of transferases, specifically those transferring phosphorus-containing groups (phosphotransferases) with an alcohol group as acceptor. The first detailed investigation of the enzyme was conducted by McCamen in 1962, where it was shown that the brain is the richest source of the enzyme in mammalian tissue. A related enzyme, ethanolamine kinase, tends to co-purify with choline kinase leading to a suggestion that the two activities are mediated by two distinct active sites on a single protein. These enzymes participate in glycine, serine and threonine metabolism and glycerophospholipid metabolism. In mammalian cells, the enzyme exists as three isoforms: CK α -1, CK α -2 and CK β . These isoforms are encoded by two separate genes, CHKA and CHKB and are only active in their homodimeric, heterodimeric and oligomeric forms. This product with the indicated enzyme activity was briefly purified from engineered *E.coli*.
- 产品详细信息见下表:

About this product	
Name	Choline Kinase (Crude Enzyme); 胆碱激酶(粗酶液)
Application	以三磷酸腺苷(ATP)作为磷酸的供体, 催化胆碱发生磷酸化。
Appearance	Clear to translucent yellow solution
Enzyme activity	Undetermined
About this enzyme	
Name	Choline Kinase; 胆碱激酶
CAS Number	9026-67-9
EC Number	2.7.1.32
Enzymatic Reaction	ATP + choline = ADP + phosphocholine
Synonyms	Choline Kinase (phosphorylating); choline phosphokinase; choline-ethanolamine kinase
Systematic name	ATP:choline phosphotransferase
Cofactor(s)	ATP
Application	biotechnology; diagnostics; drug development; medicine

包装清单:

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P3676-1L	Choline Kinase (Crude Enzyme)	1L
—	说明书	1份

保存条件:

-20°C或更低温度保存, 至少1个月有效。

注意事项:

- 由于本产品需新鲜制备, 在您确认订购后约6个工作日才能发货。个别情况首次制备出现问题, 发货时间会顺延。
- 粗酶液的每次冻融均可能会引起部分失活, 所以收到酶液后请根据需要进行分装, 并置于-20°C或更低温度保存。

- 随着保存时间的延长，酶活力会有一定程度的下降，收到产品后应尽快使用。
- 本产品在生产和保存的过程中可能会有混浊或沉淀产生，融化后混匀即可，不影响正常使用。
- 本产品仅限于专业人员的科学研究用，不得用于临床诊断或治疗，不得用于食品或药品，不得存放于普通住宅内。
- 为了您的安全和健康，请穿实验服并戴一次性手套操作。

使用说明：

1. 收到产品后请立即使用或按照说明书推荐的条件保存。随着保存时间的延长，酶活力会有一定程度的下降。
2. 具体的最佳工作条件请自行参考相关文献，或者通过实验进行摸索和优化。

相关产品：

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