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Recombinant β-lactamase TEM-1

产品编号	产品名称	包装
P7082-1mg	Recombinant β-lactamase TEM-1	1mg
P7082-5mg	Recombinant β-lactamase TEM-1	5mg
P7082-10mg	Recombinant β-lactamase TEM-1	10mg
P7082-100mg	Recombinant β-lactamase TEM-1	100mg

产品简介：

Species	Gene ID	Accession	Source	Length	MW	Tag
—	2716540	P62593	*E. coli*	264aa	28.9kDa	—

About this protein	
Name	Recombinant β-lactamase TEM-1 (Recombinant β-lactamase TEM-1; rTEM-1); 重组β-内酰胺酶 TEM-1
Synonyms	Beta-lactamase TEM; IRT-4; Penicillinase; TEM-1; TEM-16/CAZ-7; TEM-2; TEM-24/CAZ-6; TEM-3; TEM-4; TEM-5; TEM-6; TEM-8/CAZ-2; bla; blaT-3; blaT-4; blaT-5; blaT-6
Purity	>95% by SDS-PAGE.
Biological Activity	Fully biologically active when compared to standard. One unit of enzyme activity is defined as the amount of enzyme which will hydrolyze 1.0μmol of benzyl penicillin in presence of EDTA at pH 7.0 and at 25°C.
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation	Lyophilized from a 0.2μm filtered concentrated solution in 100mM Tris, pH7.0.
Endotoxin	N/A
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0mg/ml. Stock solutions should be apportioned into working aliquots and stored at ≤-20°C. Further dilutions should be made in appropriate buffered solutions.
Category	Enzymes
Background	Beta-lactamases are enzymes produced by some bacteria and are responsible for their resistance to beta-lactam antibiotics like penicillins, cephamycins, and carbapenems. The lactamase enzyme breaks the β-lactam ring open and deactivates the molecule's antibacterial properties because of a common element in these antibiotics molecular structure: a four-atom ring known as a betalactam. TEM-1 is the most commonly-encountered beta-lactamase in gram-negative bacteria. Up to 90% of ampicillin resistance in *E. coli* is due to the production of TEM-1. Also responsible for the ampicillin and penicillin resistance that is seen in H.influenzae and N.gonorrhoeae in increasing numbers. Based upon different combinations of changes, currently 140 TEM-type enzymes have been described. Recombinant beta-lactamase TEM-1 contains 264 amino acids residues.
Amino Acid Sequence	MHPETLVKVK DAEDQLGARV GYIELDLNSG KILESFRPEE RFPMMSTFKV LLCGAVLSRV DAGQEQLGRR IHYSQNDLVE YSPVTEKHLT DGMTVRELCS AAITMSDNTA ANLLLTTIGG PKELTAFLHN MGDHVTRLDR WEPELNEAIP NDERDTTMPA AMATTLRKLL TGELLTLASR QQLIDWMEAD KVAGPLLRSA LPAGWFIADK SGAGERGSRG IIAALGPDGK PSRIVVIYTT GSQATMDERN RQIAEIGASL IKHW

包装清单：

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P7082-100mg	Recombinant β-lactamase TEM-1	100mg
—	说明书	1份

保存条件：

-20°C或更低温度保存，至少一年有效。由于蛋白的每次冻融均会引起部分失活，所以首次配制成相应浓度的储存液后(请根据产品简介中Reconstitution一栏的信息配制储存液)，须分装后-20°C或更低温度冻存，以避免反复冻融。

注意事项：

- 由于有些塑料管壁对某些蛋白有较强的吸附作用，溶液中的蛋白很容易粘附在管壁上，并且粘附后的蛋白很难与管壁分离。而载体蛋白(Carrier protein，如0.1% BSA等)的主要作用是预先封闭塑料管壁上的蛋白结合位点，使细胞因子或重组蛋白不会粘附于管壁。所以一定要使用产品简介中Reconstitution一栏的信息配制储存液。
- 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. 收到产品后请立即按照说明书推荐的条件保存。除非特别注明，碧云天相关产品均为冻干粉，由于微量的蛋白在冻干过程中沉积在管内，形成很薄或不可见的蛋白层，所以在打开管盖前，我们建议在离心机中约8,000-12,000g离心10-30秒，使附着在管盖或管壁上的蛋白聚集于管底。
2. 请根据实验目的并按照产品简介中Reconstitution一栏中的信息配制储存液。大多数细胞因子或重组蛋白的冻干粉是非常容易溶解的，一般用移液枪的枪头轻吹几下或者轻轻摇晃瓶子，即可使细胞因子或重组蛋白完全溶解。请勿用vortex剧烈振荡，以免蛋白变性而失活。
3. 具体的最佳工作浓度请自行参考相关文献，或者根据实验目的，以及特定细胞和动物，通过实验进行摸索和优化。

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