

Klebsiella pneumoniae Pullulanase

Klebsiella pneumoniae, (pulA)

Cat. No. DAG098

Lot. No. (See product label)

PRODUCT INFORMATION

Product Overview: Enzyme purified from Klebsiella pneumoniae (Aerobacter aerogenes)

Description: Pullulanase is a specific kind of glucanase, an amylolytic exoenzyme, that degrades pullulan. It is produced as an extracellular, cell surface-anchored lipoprotein by Gram-negative bacteria of the genus Klebsiella. Type I pullulanases specifically attack α -1,6 linkages, while type II pullulanases are also able to hydrolyse α -1,4 linkages. It is also produced by some other bacteria and archaea. Pullulanase is used as a detergent in biotechnology.

Form: Liquid suspended in 3.2M ammonium sulfate solution, pH 6.

Origin: Klebsiella pneumoniae (Aerobacter aerogenes)

Specific Activity: Approximately 40 units/mg protein

Optimum pH: 5.5 - 6.0

Characteristic: Hydrolyzes the α -1,6-glucosidic linkages in amylopectin and pullulan.

Enzyme Unit: One unit liberates 1.0 μ mole/minute of maltotriose from pullulan at pH 6.0 and 30°C per minute.

Use: Structural determination of polysaccharides.

GENE INFORMATION

Gene Name: [pulA pullulanase \[Klebsiella pneumoniae 342\]](#)

Official Symbol: pulA

Synonyms: pullulanase; YP_002240364.1; EC 3.2.1.41

GeneID: [6939999](#)

mRNA Refseq: [NC_011283](#)

Protein Refseq: [YP_002240364](#)

Enzyme entry: EC 3.2.1.41

UniProt: B5Y1M3

PACKAGE

Storage: Activity is retained over a period of 6 months on storage at 0° to 8°C.

Warning: This product may contain a preservative such as sodium azide, thimerosal or proclin. Please see lot specific chemical credential for preservative information.

REFERENCES

1. Arch. Biochem. Biophys. vol 137, 483-493 1970.
2. Biochim. Biophys. Acta. vol. 268, 497-505, 1972.
3. Biochim. Biophys. Acta. Vol. 293, 197-202, 1973.