ChemPure* Brand Chemicals

January 22, 2021

CERIFICATE OF ANALYSIS

...Pure Quality

Product Name: Proteinase K, Bio Grade

Product No: CP-V8600R *from Beauveria Brongniartii* CAS: 39450-01-6	
Lot No.:20201125	Manufacture Date: November 25, 2020
Batch Quantity: 500g	Retest Date: November 24, 2022

Item	Specification	Result
Appearance	White to off-white powder	White powder
Electrophoretic Purity	≥95%	Conforms
Solubility(Turbidity)1mg/ml,H2o	Clear	Clear
Enzyme Activity	≥30 units/mg	32 units/mg
Extraction of 20-liter whole blood genomic DNA from poultry	Purity or DNA ≥8μg	10.2 μg

Quality Control: Yanming	Analyst: Liyan	Inspector: Charles Jr.

Conclusion: Up to standard

Remarks: DD-047255

Attention: Store in cool and dry area

Proteinase K specification

Product introduction: DD-035208

Proteinase K exhibits broad substrate specificity. It degrades many proteins in the native state even in the presence of detergents. Proteinase K is isolated from a fungus, *Beauveria brongniartii* which is able to grow on keratin. The predominant site of cleavage is the peptide bond adjacent to the carboxyl group of aliphatic and aromatic amino acids with blocked alpha amino groups. Proteinase K is a stable and highly reactive serine protease. It is stable in a broad range of environments: pH (4 to 12.5), buffer salts, detergents (0.1-0.5% SDS) and temperature (0 to 75 ℃). Proteinase K is commonly used in molecular biology to digest protein and remove contamination from preparations of nucleic acid. It is also used in leather industry (leather softening, leather refinement, leather depilation and silk degumming), food industry (meat tenderization and wine clarification) and detergent industry. It is highly suited to this application since the enzyme is active in the presence of chemicals that denature proteins, such as SDS and urea, chelating agents such as EDTA, sulfhydryl reagents, as well as trypsin or chymotrypsin inhibitors. Proteinase K is used for the destruction of proteins in cell lysates (tissue, cell culture cells) and for the release of nucleic acids, since it very effectively inactivates DNases and RNases.

Product name: Proteinase K from *Beauveria brongniartii*
Product number: Purity: 95% (SDS-PAGE) Units/mg protein: ≥30 U/mg (Enzymatic Activity Unit Definition: One unit will hydrolyze urea denatured hemoglobin to produce color equivalent to 1.0 micromole of tyrosine per minute at pH 7.5 at 37 ℃)

Storage:
Long-term storage temperature: -20℃, or not more than 4℃.
The enzyme powder can be transported at room temperature, for short periods. Under proper storage conditions, the recommended retest after 2 years, maximum shelf life period is up to three years.

It is certified that the above copy is a true copy of the actual lot analysis from the manufacturer.

Vyto Mekesa, QC Director

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