



**ChemPure* Brand
Chemicals**

May 3, 2019

CERIFICATE OF ANALYSIS

...Pure Quality

Product Name: Proteinase K, Bio Grade

Product No: CP-V8600R	from <i>Beauveria Brongniartii</i>
CAS: 39450-01-6	
Lot No.:20190124	Manufacture Date: January 24, 2019
Batch Quantity:100g	Retest Date: January 23, 2021

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 ≥5µg	10.84 µg

Quality Control: Yanming	Analyst: Liyan	Inspector: Zhangjun
--------------------------	----------------	---------------------

Conclusion: Up to standard

Remarks: DD-035208

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 °C). 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 °C)

Storage:

Long-term storage temperature: -20°C, or not more than 4°C.

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.

Important: The information presented herein, while not guaranteed, was prepared by technical personnel and is true and accurate to the best of our knowledge. NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, OR WARRANTY OR GUARANTY OF ANY OTHER KIND, EXPRESS OR IMPLIED, IS MADE REGARDING PERFORMANCE, SAFETY, SUITABILITY, STABILITY OR OTHERWISE. This information is not intended to be all inclusive as to the manner and conditions of use, handling, storage, disposal, and other factors that may involve other or additional legal, environmental, safety or performance considerations, and CHEMPURE BRAND CHEMICALS assumes no liability whatsoever for the use of or reliance upon this information. Our technical personnel will be happy to respond to questions, safe handling and use of the product remains the responsibility of the customer. No suggestions for use are intended as, and nothing herein shall be construed as, are recommendation to infringe any existing patents or to violate any Federal, State, Local or foreign laws.

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

Vyto Mekesa, QC Director

SUPPORT@CHEMPUREBRAND.COM - WWW.CHEMPUREBRAND.COM

ChemPure Brand Chemicals • P: 440.725.2802 • F: 734.405.6623 • 39103 Warren Rd., Westland, MI 48185