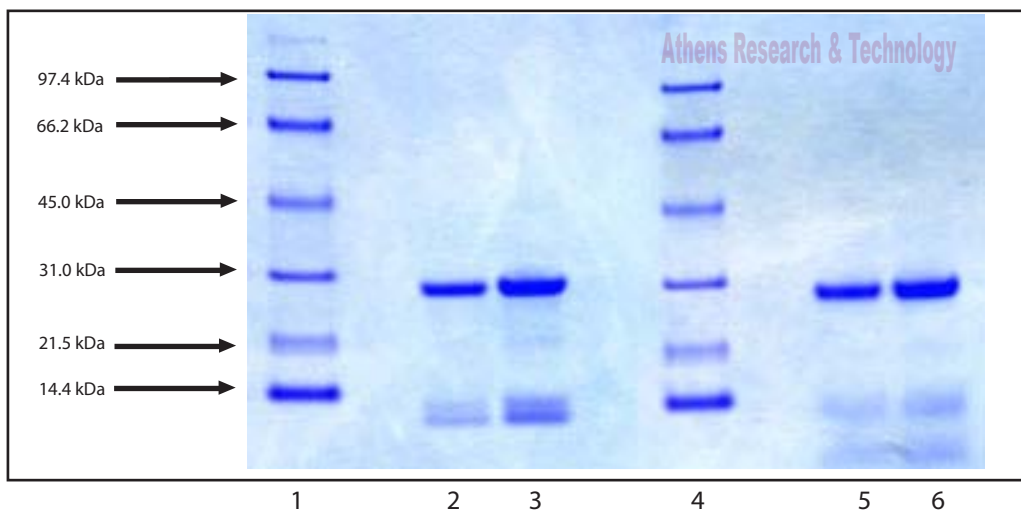


# Athens Research & Technology

110 Trans Tech Drive Athens, GA 30601 USA  
PHONE: 706-546-0207 • FAX: 706-546-7395 • EMAIL: ARTBIO@ATHENSRESEARCH.COM  
www.athensresearch.com

## Gel Scan of Representative Lot

**Cathepsin D , Human Liver**  
ART Catalog No. 16-12-030104



SDS-PAGE:

4 - 12% Bis-Tris NuPAGE gel

1. LMW Standard (BIO-RAD Cat. No. 161-0304)
2. Cathepsin D - 4  $\mu$ g (non-reduced / no heat)
3. Cathepsin D - 7  $\mu$ g (non-reduced / no heat)
4. LMW Standard (BIO-RAD Cat. No. 161-0304)
5. Cathepsin D - 4  $\mu$ g (reduced / heated)
6. Cathepsin D - 7  $\mu$ g (reduced / heated)

**Molecular Weight:** 42,000

**Protein Determination:**

Extinction Coefficient (E)  $\frac{0.1\% \text{ at } 280\text{nm}}{1\text{cm pathway}} = 1.0$

**Physical Specifications:**

Frozen  
Purity:  $\geq 95\%$  by SDS-PAGE

**Activity:**

Greater than 300 units per mg protein. One unit is defined as the amount of enzyme which digests hemoglobin-releasing peptides which are soluble in 10% TCA. The reaction is measured by an increase of an  $A_{280}$  of 1.0 per 60 minutes at 37°C. Substrate: acid denatured hemoglobin (0.2% in reaction mixture). Buffer: 0.1 M formate, pH 3.3.

**Considerations:**

Storage Conditions:  $\leq -70^\circ \text{C}$

Stability > 1 year

Buffer: 2 mM Na Phosphate, pH 6.5

Virginia B. Patel PhD

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## Product Datasheet

Product:	Cathepsin D, Human Liver
Catalog Number:	16-12-030104
Description:	Lyophilized
Buffer:	2 mM Na Phosphate, pH 6.5
Purity:	>=95% by SDS-PAGE
Activity:	Greater than 300 units per mg protein. One unit is defined as the amount of enzyme which digests hemoglobin-releasing peptides which are soluble in 10% TCA. The reaction is measured by an increase of an $A_{280}$ of 1.0 per 60 minutes at 37°C. Substrate: acid denatured hemoglobin (0.2% in reaction mixture). Buffer: 0.1 M formate, pH 3.3.
Molecular Weight:	MW 42,000
Protein Determination:	Extinction Coefficient (E) $\frac{0.1\% \text{ at } 280\text{nm}}{1\text{cm pathway}} = 1.0$
Storage:	Store <= -20° C
Stability:	> 1 year
Available Packaging:	25 µg per vial Larger aliquots upon request
Source:	Human Plasma
Testing:	Shown to be non reactive for HBsAg, anti-HCV, anti-HBc, and negative for anti-HIV 1 & 2 by FDA approved tests.

**Athens Research & Technology products are laboratory reagents and are not to be administered to humans or used for any drug purpose.  
For research use or for use in further manufacturing.**

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ISO9001:2008

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## Certificate Of Origin

Product Name:	Cathepsin D, Human Liver
Catalog Number:	16-12-030104
Lot Number:	Information applies to all lots produced.
Manufacturing Information:	The methods and controls used in this facility for manufacturing, processing, packaging and holding of our products are in accordance with ISO9001:2008 Quality Management System.
Manufacturing Site:	Athens Research & Technology Inc., Athens, Georgia, USA
Raw Material Information:	The product contains no materials directly of animal origin and has not been in contact with products of animal origin in the course of its purification.
Country of Origin (manufacturing):	United States
Biological Source Material (COO):	United States
Donor Consent:	The raw material used in the purification of this product has been obtained from an FDA licensed collection center. Further the donor or the donor's next of kin has given by signature full informed consent for the material to be used in commercial scientific research, including the sharing, transferring, or selling of samples to third parties involved in this research. The raw material was obtained in an ethical manner in full compliance with national legislation, and the donor identity is held as confidential information by the licensed collection center.

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