

# Product Data Sheet

## Atholate™

Catalog Number: 0134

### Product Description

Atholate™ is a proprietary blend of plant protein hydrolysates designed to directly replace traditional casein hydrolysate in the preparation of bacteriological media. Atholate™ is APF (Animal-Product-Free) Certified™: guaranteed to have no animal derivatives. It matches the nutritional (see the Table below) and performance characteristics of standard casein hydrolysates (see the Figure below). Atholate™ is the key ingredient in Athena's Animal-Product-Free LB Broths and Prime-olate™ Expression Media formulations and can be used for the cultivation of a wide range of microbial species including *Escherichia coli*, *Salmonella*, *Pseudomonas*, *Bacillus* and other eubacteria species.

### Product Specifications

Unit Size	0134 : 500g, 0134-1: 1kg, 0134-2.5: 2.5kg, 0134-10: 10kg
Shipping	This product is shipped at room temperature.
Storage	Store at room temperature.

### Amino Acid Composition in APF LB Media (mg per liter)

mg/L	ala	arg	asp	cys	glu	gly
Casein Hydrolysate	301	313	674	30	1,858	189
Athena's APF Blend 16	367	660	868	125	2,438	369
	met	phe	pro	ser	thr	trp
Casein Hydrolysate	272	398	884	514	418	98
Athena's APF Blend 16	164	469	698	479	341	54
	his	ile	leu	lys	tyr	val
Casein Hydrolysate	222	436	746	677	282	590
Athena's APF Blend 16	206	386	672	414	302	428
Totals:	Casein Hydrolysate:			8,902		
	Athena's APF Blend 16			9,437		

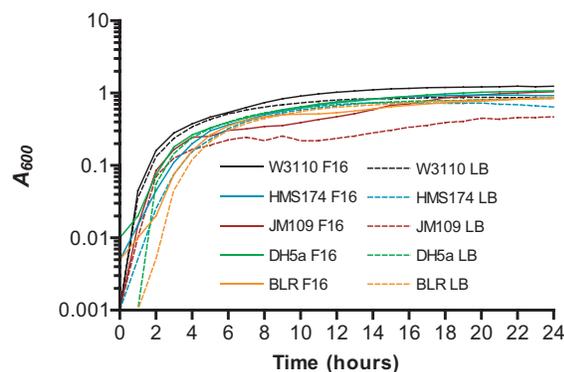
### Recommended Use

1. Dissolve 15g per Liter for the cultivation of *Escherichia coli*. The actual amount needed for other microbial strains may vary and should be determined empirically.



**Athena Enzyme Systems™** T (MD): 410-455-6319  
1450 South Rolling Road T (USA): 888-892-8408  
Baltimore, MD 21227 F: 410-455-1155  
**AthenaES®** USA support@athenaes.com  
a division of Athena Environmental Sciences, Inc.

### Growth curves for wild-type and four commonly used *E. coli* strains



**Figure 1.** Duplicate cultures of each strain were grown as described in Figure 1 in LB (Miller) or APF LB Formula 16.

### Material Safety Data

FOR RESEARCH AND MANUFACTURING USE ONLY. NOT INTENDED OR APPROVED FOR HUMAN, DIAGNOSTICS OR VETERINARY USE. Do not ingest, swallow or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. For complete safety information see full Material Safety Data Sheet.