

Amino Acid Profile of Yeast Extract

Yeast extracts are the water-soluble fraction generated by autolysis (i.e., enzymes from within the yeast cells hydrolyze their own proteins). These extracts are used in some microbial culture media as a source of amino acids and peptides (Table 1), as well as vitamins, nitrogen, and carbon.

Table 1. Estimate of the amino acid profile of yeast extract.

Amino Acid	Total Amino Acids (mg/g)	Free Amino Acids (mg/g)
Alanine	41	30
Arginine	27	8
Asparagine	—	10
Aspartic Acid	61	18
Cystine	5	0.1
Glutamic Acid	99	51
Glutamine	—	0.4
Glycine	27	8
Histidine	11	4
Isoleucine	30	16
Leucine	42	30
Lysine	46	10
Methionine	9	6
Phenylalanine	24	17
Proline	23	5
Serine	27	16
Threonine	28	12
Tryptophan	8	4
Tyrosine	21	13
Valine	35	19

Additional Resources

www.teknova.com/resource/amino-acids

www.teknova.com/resource/how-to-choose-bacterial-culture-media

Related Products

Most Teknova media are offered as broth, plates, and dry mixes with or without supplements (e.g., antibiotics, additives, and dropout components). Additional options are available at www.teknova.com.

Name	Size	SKU
Yeast Extract		
Yeast Extract, Dry	500 g to 10 kg	Y9050, Y9020
20% Yeast Extract	1 L	Y1204
Media		
2X YT	Varies	Y2140, Y4210
Terrific Broth	Varies	T7062, T4975
YED, YEP, and YPD/YEPD	Varies	Y0540, Y3025, Y1000, Y9110