

氨基酸性质一览表
Properties of Amino Acids

Name	Mol. form	M_r	$t_m/^\circ\text{C}$	$\text{p}K_a$	$\text{p}K_b$	$\text{p}K_c$	$\text{p}K_d$	pI	S/g kg ⁻¹	$V_2^0/\text{cm}^3 \text{mol}^{-1}$
7-Aminoheptanoic acid	$\text{C}_7\text{H}_{15}\text{NO}_2$	145.20	195						v.s.	120.0
6-Aminohexanoic acid	$\text{C}_6\text{H}_{13}\text{NO}_2$	131.17	205					7.29	863	104.2
<i>L</i> -3-Amino-2-methylpropanoic acid	$\text{C}_4\text{H}_9\text{NO}_2$	103.12	185						s.	
2-Amino-2-methylpropanoic acid	$\text{C}_4\text{H}_9\text{NO}_2$	103.12	335	2.36	10.21			5.72	137	77.55
9-Aminononanoic acid	$\text{C}_9\text{H}_{19}\text{NO}_2$	173.26	191							151.3
8-Aminooctanoic acid	$\text{C}_8\text{H}_{17}\text{NO}_2$	159.23	192							136.1
5-Amino-4-oxopentanoic acid	$\text{C}_5\text{H}_9\text{NO}_3$	131.13	118	4.05	8.90					
5-Aminopentanoic acid	$\text{C}_5\text{H}_{11}\text{NO}_2$	117.15	157 dec						s.	87.6
<i>o</i> -Anthranilic acid	$\text{C}_7\text{H}_7\text{NO}_2$	137.14	146	2.05	4.95				3.5 ¹⁴	
Azaserine	$\text{C}_5\text{H}_7\text{N}_3\text{O}_4$	173.13	150			8.55			v.s.	
Canavanine	$\text{C}_5\text{H}_{12}\text{N}_4\text{O}_3$	176.17	172	2.50	6.60	9.25		7.93	v.s.	
<i>L</i> - γ -Carboxyglutamic acid	$\text{C}_6\text{H}_9\text{NO}_6$	191.14	167	1.70	9.90	4.75	3.20			
Carnosine	$\text{C}_9\text{H}_{14}\text{N}_4\text{O}_3$	226.23	260	2.51	9.35	6.76				322
Citrulline	$\text{C}_6\text{H}_{13}\text{N}_3\text{O}_3$	175.19	222	2.32	9.30			5.92	s.	
Creatine	$\text{C}_4\text{H}_9\text{N}_3\text{O}_2$	131.13	303	2.63	14.30					16
<i>L</i> -Cysteic acid	$\text{C}_3\text{H}_7\text{NO}_5\text{S}$	169.16	260	1.89	8.70	1.30				v.s.
<i>L</i> -Cystine	$\text{C}_6\text{H}_{12}\text{N}_2\text{O}_5\text{S}_2$	240.30	260	1.50	8.80	2.05	8.03			0.11
2,4-Diaminobutanoic acid	$\text{C}_4\text{H}_{10}\text{N}_2\text{O}_2$	118.13	118.1	1.85	8.24	10.44		9.27		s.
3,5-Dibromo- <i>L</i> -tyrosine	$\text{C}_9\text{H}_9\text{Br}_2\text{NO}_3$	338.98	245							2.72
3,5-Dichloro- <i>L</i> -tyrosine	$\text{C}_9\text{H}_9\text{Cl}_2\text{NO}_3$	250.08	247							1.97
3,5-Diiodo- <i>L</i> -tyrosine	$\text{C}_9\text{H}_9\text{I}_2\text{NO}_3$	432.98	213	2.12	9.10	6.16				0.62
Dopamine	$\text{C}_8\text{H}_{11}\text{NO}_2$	153.18			10.36	8.88				s.
<i>L</i> -Ethionine	$\text{C}_6\text{H}_{13}\text{NO}_2\text{S}$	163.24	273	2.18	9.05	13.10				
<i>N</i> -Glycylglycine	$\text{C}_4\text{H}_8\text{N}_2\text{O}_3$	132.12	263	3.13	8.10					225
Guanidinoacetic acid	$\text{C}_3\text{H}_7\text{N}_3\text{O}_2$	117.11	282	2.82						5
Histamine	$\text{C}_5\text{H}_9\text{N}_3$	111.15	83		9.83	6.11				v.s.
<i>L</i> -Homocysteine	$\text{C}_4\text{H}_9\text{NO}_2\text{S}$	135.19	232	2.15	8.57	10.38		5.55		s.
Homocystine	$\text{C}_8\text{H}_{16}\text{N}_2\text{O}_4\text{S}_2$	268.35	264	1.59	9.44	2.54	8.52			0.2
<i>L</i> -Homoserine	$\text{C}_4\text{H}_9\text{NO}_3$	119.12	203	2.27	9.28			6.17		1100
3-Hydroxy- <i>DL</i> -glutamic acid	$\text{C}_5\text{H}_9\text{NO}_5$	163.13	209					3.28		
5-Hydroxylysine	$\text{C}_6\text{H}_{14}\text{N}_2\text{O}_3$	162.19		2.13	8.85	9.83		9.15		
<i>trans</i> -4-Hydroxy- <i>L</i> -proline	$\text{C}_5\text{H}_9\text{NO}_3$	131.13	274	1.82	9.47			5.74	361	84.49
<i>L</i> -3-Iodotyrosine	$\text{C}_9\text{H}_9\text{INO}_3$	307.08	205	2.20	9.10	8.70				sl.s.
<i>L</i> -Kynurenine	$\text{C}_{10}\text{H}_{12}\text{N}_2\text{O}_3$	208.21	194							sl.s.
<i>L</i> -Lanthionine	$\text{C}_6\text{H}_{12}\text{N}_2\text{O}_4\text{S}$	208.24	294							1.5
Levodopa	$\text{C}_9\text{H}_{11}\text{NO}_4$	197.19	277	2.32	8.72	9.96	11.79			5 ²⁰
<i>L</i> -1-Methylhistidine	$\text{C}_7\text{H}_{11}\text{N}_3\text{O}_2$	169.18	249	1.69	8.85	6.48				200
<i>L</i> -Norleucine	$\text{C}_6\text{H}_{13}\text{NO}_2$	131.17	301	2.31	9.68			6.09	15	107.7
<i>L</i> -Norvaline	$\text{C}_5\text{H}_{11}\text{NO}_2$	117.15	307	2.31	9.65					107
<i>L</i> -Ornithine	$\text{C}_5\text{H}_{12}\text{N}_2\text{O}_2$	132.16	140	1.94	8.78	10.52		9.73		v.s.
<i>O</i> -Phosphoserine	$\text{C}_3\text{H}_8\text{NO}_6\text{P}$	185.07	166	2.14	9.80	5.70				
<i>L</i> -Pyroglutamic acid	$\text{C}_5\text{H}_7\text{NO}_3$	129.12	162	3.32						
Sarcosine	$\text{C}_3\text{H}_7\text{NO}_2$	89.09	212	2.18	9.97					428
Taurine	$\text{C}_2\text{H}_7\text{NO}_3\text{S}$	125.15	328	-0.3	9.06					105
<i>L</i> -Thyroxine	$\text{C}_{15}\text{H}_{11}\text{I}_4\text{NO}_4$	776.87	235	2.20	10.01	6.45				sl.s.