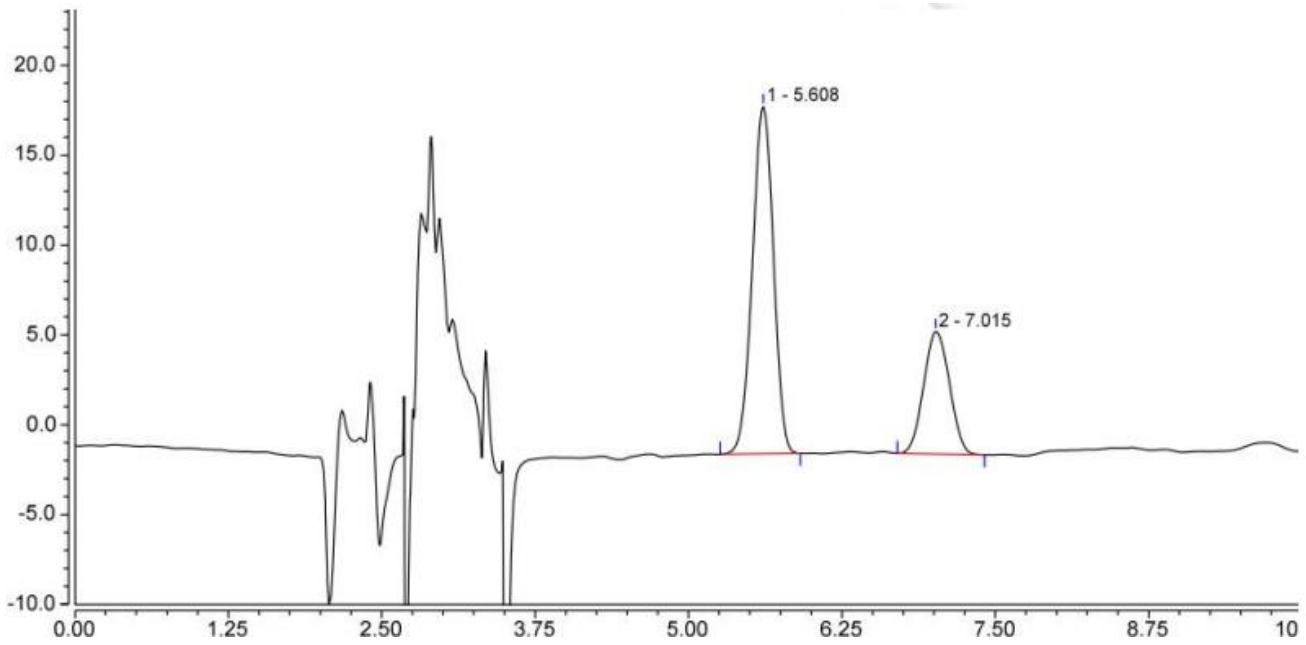
Bridging Separation Techniques

Separation of homoserine and 2-amino-4-butyrolactone by Xtimate C18

Method:

Column	Xtimate® C18（4.6×250mm，5μm)
Mobile Phase	0.01mol/L potassium dihydrogen phosphate (containing 2g/L sodium heptane sulfonate, adjusted to pH 1.5 with phosphoric acid)/acetonitrile=95/5
Detection	210nm
Temperature	30℃
Flow Rate	1.0 ml/min
Injection Volume	20 μL
Note	/

Chromatogram and Data:



No.	S/N	Retention Time min	Area mAU*min	Height mAU	Plates (EP)	Asymmetry (EP)	Resolution (EP
1	595.1	5.608	3.852	19.341	4945	0.97	3.94
2	210.2	7.015	1.667	6.832	5012	1.05	n.a.

Conclusion:

Using Welch Xtimate® C18 (4.6×250mm, 5μm) chromatographic column, under the chromatographic conditions, the homoserine and 2-amino-4-butyrolactone can be completely separated, which can meet the detection requirements.