

Temozolomide and Related Impurities

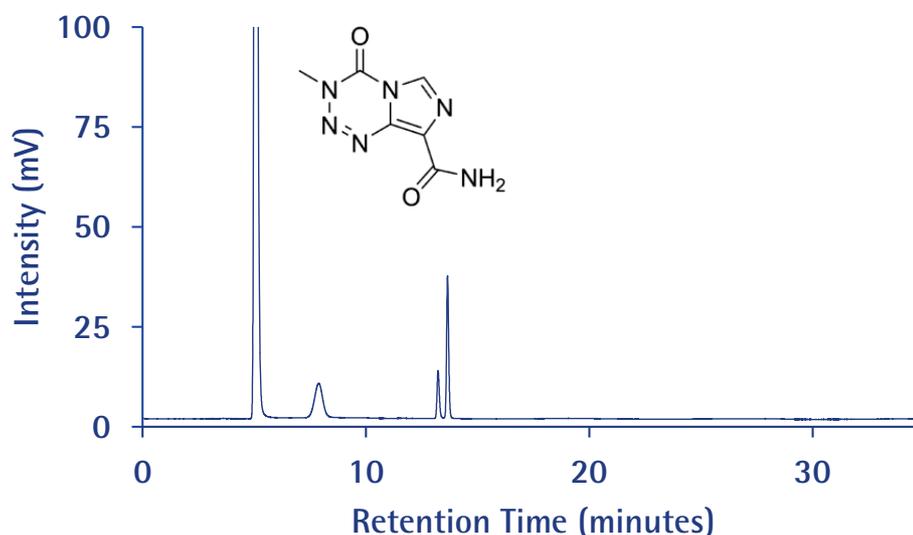
SeQuant® ZIC®-HILIC

Chromatographic Conditions

Column:	SeQuant® ZIC®-HILIC (5 µm, 200 Å) 250×4.6 mm	1.50458.0001
Injection:	10 µL	
Detection:	Shimadzu Prominence, UV 254 nm	
Cell:	10 µl	
Flow Rate:	0.8 mL/min	
Mobile Phase (v/v):	A: Dissolve 3.08 g of ammonium acetate in 1000 ml water (40 mM). B: 100% Acetonitrile	
Gradient:	See Table:	
Temperature:	25 °C over column and autosampler cooler set at 15 °C	
Diluent	Mobile phase	

Time (min)	A (%)	B (%)
0.0	3	97
2.0	3	97
25.0	50	50
30.0	3	97
35.0	3	97

Sample: 400 ppm of Temozolomide and 1 ppm of each impurity A, B and C in acetonitrile.
Keep the solution for 4 hrs in amber glassware before analysis for stabilization.
Use amber colored vial for analysis.



Chromatographic Data

No.	Compound	Time	Tailing Factor	Resolution*
1	Temozolomide	5.1	1.3	0.0
2	Impurity C	7.9	1.0	6.3
3	Impurity B	13.2	1.1	12.5
4	Impurity A	13.7	1.1	2.4