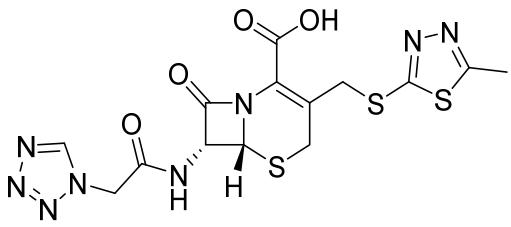
Cefazolin



Cefazolin

Cefazolin is mainly used to treat bacterial infections of the skin. It can also be used to treat moderately severe bacterial infections involving the lung, bone, joint, stomach, blood, heart valve, and urinary tract. It is clinically effective against infections caused by staphylococci and streptococci of Gram-positive bacteria. These organisms are common on normal human skin. Cefazolin is extensively used as prophylaxis antibiotic before wide range of surgical operations.

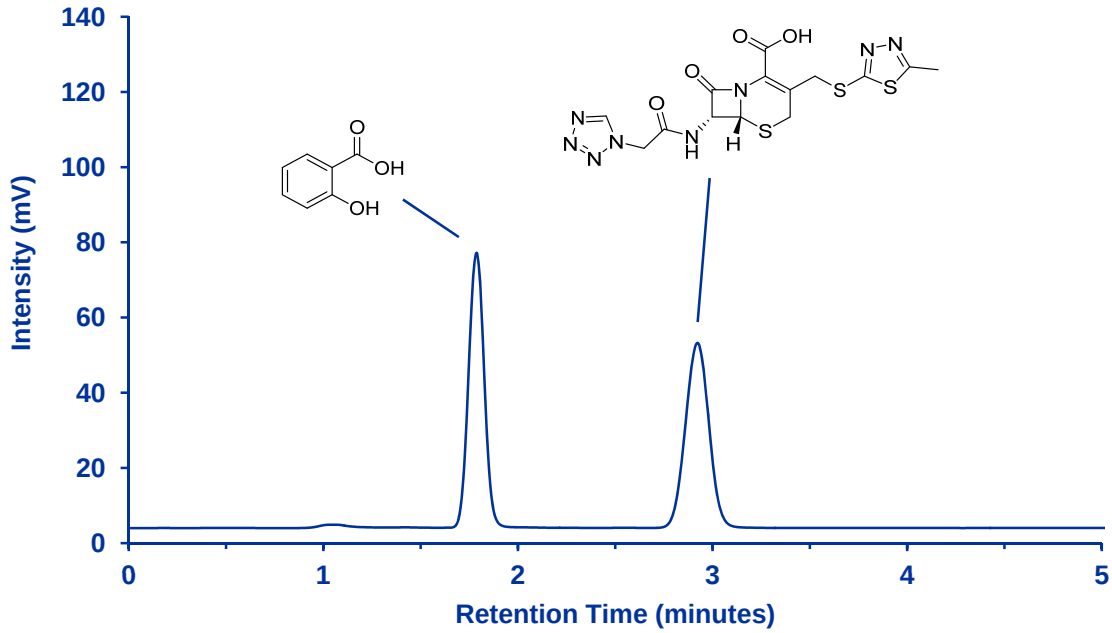
The USP impurity profiling method is a gradient method starting at 98% phosphate buffer with a 65 minute cycle time.

Cefazolin

SeQuant® ZIC®-cHILIC

Chromatographic Conditions

Column:	SeQuant® ZIC®-cHILIC (3 µm, 100 Å) PEEK 150 × 4.6 mm	1.50661.0001
Injection:	10 µL	
Detection:	Shimadzu LC-10A, UV 254 nm	
Cell:	8 µl	
Flow Rate:	1.5 mL/min	
Mobile Phase:	Buffer: Dissolve 7.7 g of ammonium acetate in 1000 ml water (100 mM). Mix Acetonitrile and Buffer 90:10 (v/v)	
Temperature:	30 °C	
Diluent	Mobile phase	
Sample:	50 ppm cefazolin and 400 ppm salicylic acid in mobile phase in mobile phase	
Pressure Drop:	118 Bar (1652 psi)	



Chromatographic Data

No	Compounds	Retention Time(min)	K'	Resolution	Theoretical Plates	Asymmetry
1	Salicylic acid (IS)	1.8	0.7	-	2400	1.0
2	Cefazolin	2.9	1.8	6.2	2800	1.0