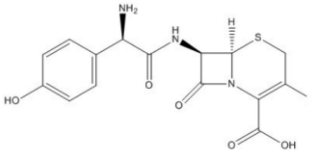
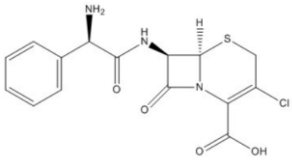
Application Note: Cephalosporins

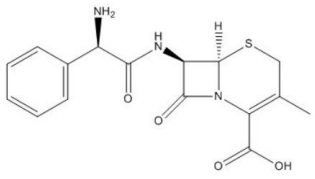
HORIZON CHROMATOGRAPHY LTD.

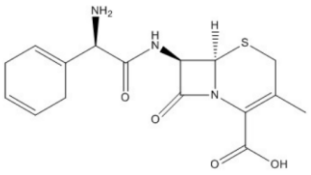
The aerobic mold which yielded cephalosporin C was found in the sea near a sewage outfall nearby Cagliari harbour, Sardinia, by the Italian pharmacologist Giuseppe Brotzu in July 1945.1 Since their discovery and subsequent commercialization in 1964, the cephalosporins today are broad-spectrum β-lactam antibiotics used for the treatment of a number of bacterial conditions including septicaemia, pneumonia and meningitis.2 The pharmacology of cephalosporins is similar to that of the penicillin class of compounds. This application brief describes use of a Quasar biphenyl column in the analysis of several cephalosporins, a mixture of first and second generation β-lactam antibiotics.

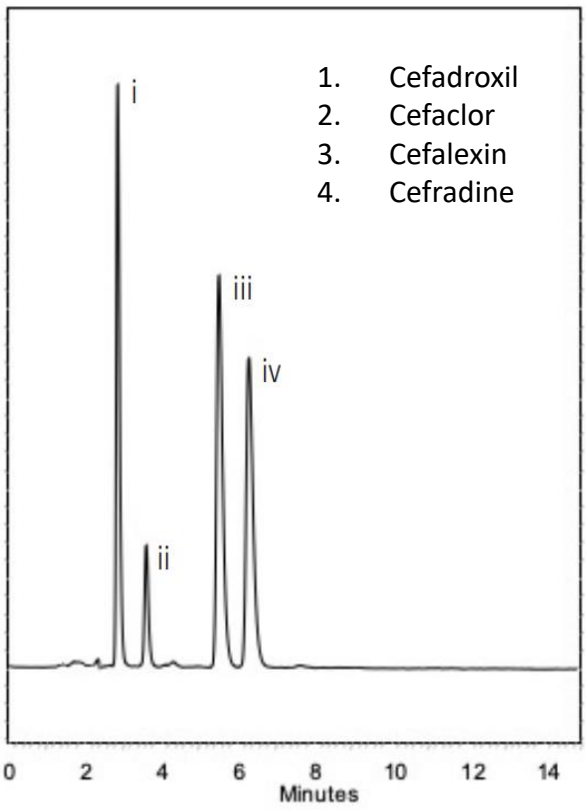




This application shows the use of an Horizon Phenyl column for the analysis of several cephalosporins.







1. Cefadroxil
2. Cefaclor
3. Cefalexin
4. Cefradine

Column:	**Horizon Phenyl, 5µm 150x4.6mm**
Mobile Phase:	80:20 0.01% Formic acid/ACN
Flow rate:	1.0 ml/min
Wavelength:	254nm
Temperature:	25°C

Application No: HZAP-0055