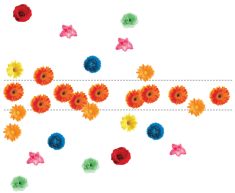
Agilent Q-TOF instruments

Find Answers Beyond the Peak Shape

To stay ahead of your analytical challenges, you need an instrument with many strengths. Unlike orbital ion traps that emphasize mass resolution and mass accuracy capabilities, Agilent Q-TOF combines uncompromised in-spectra detection with high dynamic range and fast analysis.

Six ways that Agilent Q-TOF technology delivers better spectral quality than orbital ion traps

	Agilent Q-TOF	Ion trap
1 Wider dynamic range		
5 orders of dynamic range for maximum detection		3.5 orders of dynamic range misses low abundant peaks
2 More compounds quantified		
Unlimited ions can enter the MS		Too many ions in the MS = resolution loss and peak interferences
3 Better resolution consistency		
Resolution is independent of acquisition rate		The faster your acquisition rate, the faster your resolution drops
4 Fewer required samples		
Better ion statistics + more peak data points = higher-quality data		Many replicates are needed to achieve the same power of analysis that TOF instruments deliver routinely
5 Less isotope confusion		
Isotope fidelity helps you rule different isotopes in or out		Insufficient ion statistics and dynamic range mean that you have to identify compounds by mass alone
6 Greater productivity		
Independent of speed, so you can run more experiments in less time		Speed is the fundamental enemy of ion trap resolution

DE44412.5104282407

Published in the USA, August 6, 2021
5994-4016EN

Take a deeper dive into the Agilent Q-TOF difference, download our eBook.
www.agilent.com/chem/escape-the-trap

Agilent
Trusted Answers