QC Comparison for Ga 68 Radiopharmaceuticals
Case Study

Molpure ITLC Silica Gel (SG TLC-100)
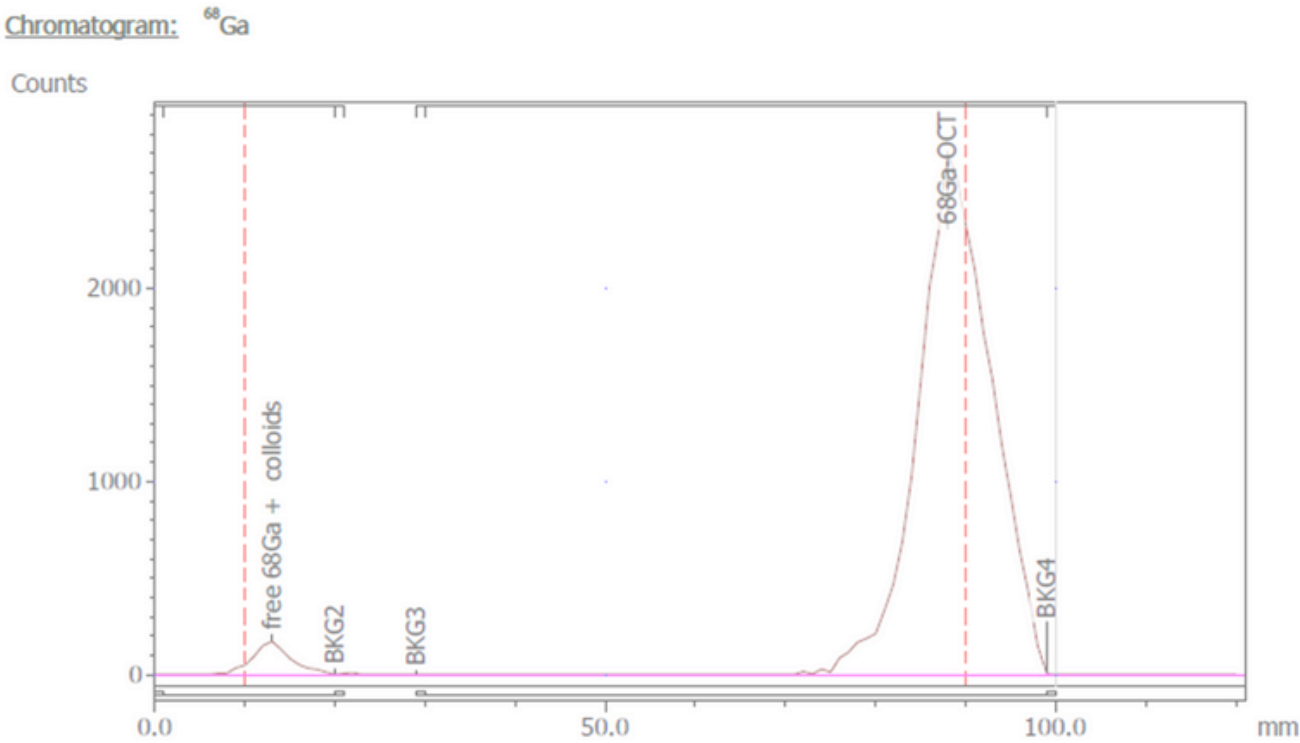

Chromatogram: ^{68}Ga
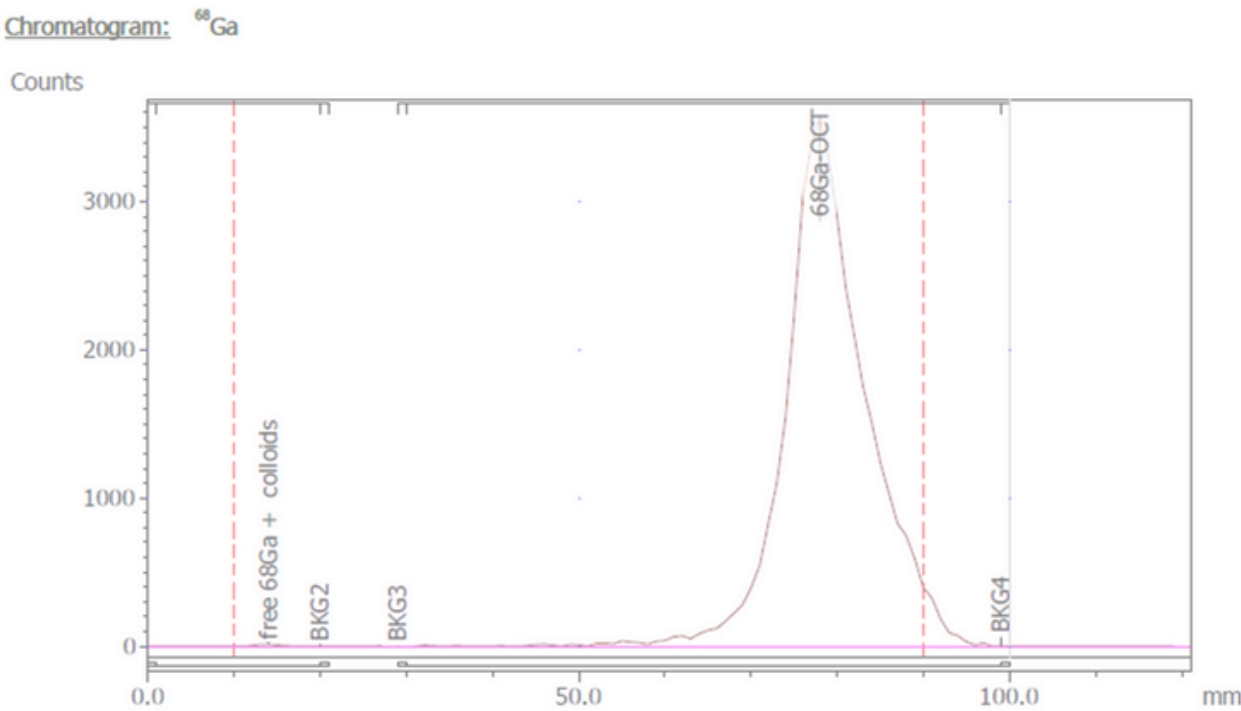
Name	Retention (RF)	%ROI (%)	FWHM (mm)
BKG1	-0.125		
free 68Ga + colloids	0.050	0.12	3.0
BKG2	0.125		
BKG3	0.238		
68Ga-OCT	0.850	99.88	8.0
BKG4	1.113		
2 Peaks		100.00	

Total Area: 37678 Counts
Average Background: 27 Counts

Agilent iTLC–SG

Chromatogram: ^{68}Ga

Name	Retention (RF)	%ROI (%)	FWHM (mm)
BKG1	-0.125		
free 68Ga + colloids	0.038	3.21	4.0
BKG2	0.125		
BKG3	0.238		
68Ga-OCT	0.975	96.79	9.0
BKG4	1.113		
2 Peaks		100.00	

Total Area: 26376 Counts
Average Background: 102 Counts

Conclusion: Improved separation and higher resolution with Molpure ITLC strips, which reduce or eliminate baseline artifacts in gallium testing.