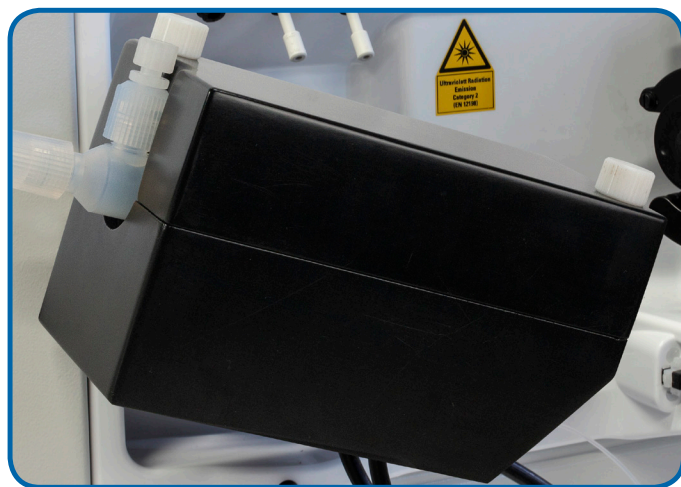


## High Performance HF-Resistant Semiconductor Sample Introduction System for iCAP Q

The high performance semiconductor kit provides an ultraclean, HF-resistant, high purity PFA sample pathway for ultimate ICPMS performance.

### Features

- Ultra-clean, high performance HP PFA chamber with Peltier cooler
- High transport efficiency
- High stability
- Direct replacement of standard iCAP Q cyclonic Peltier cooler
- Controlled through Qtegra software



Peltier-cooled HP PFA chamber for iCAP Q

### Ultra Clean: Na Calibration Curve

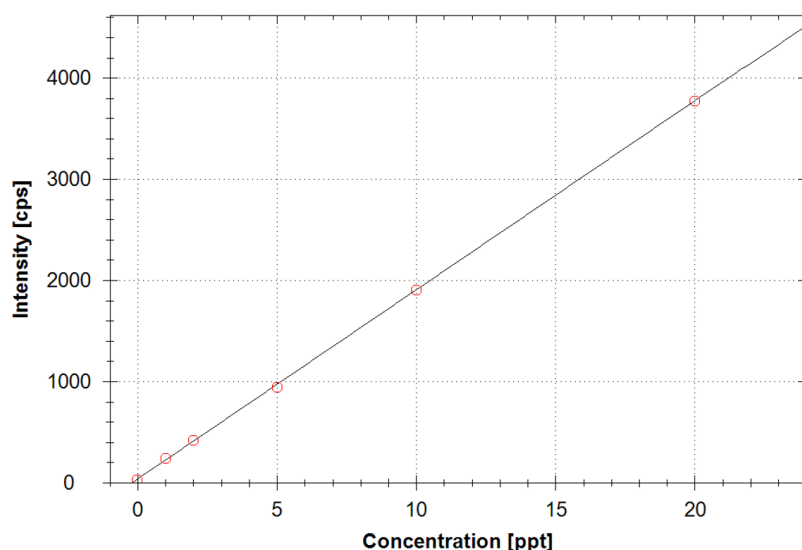
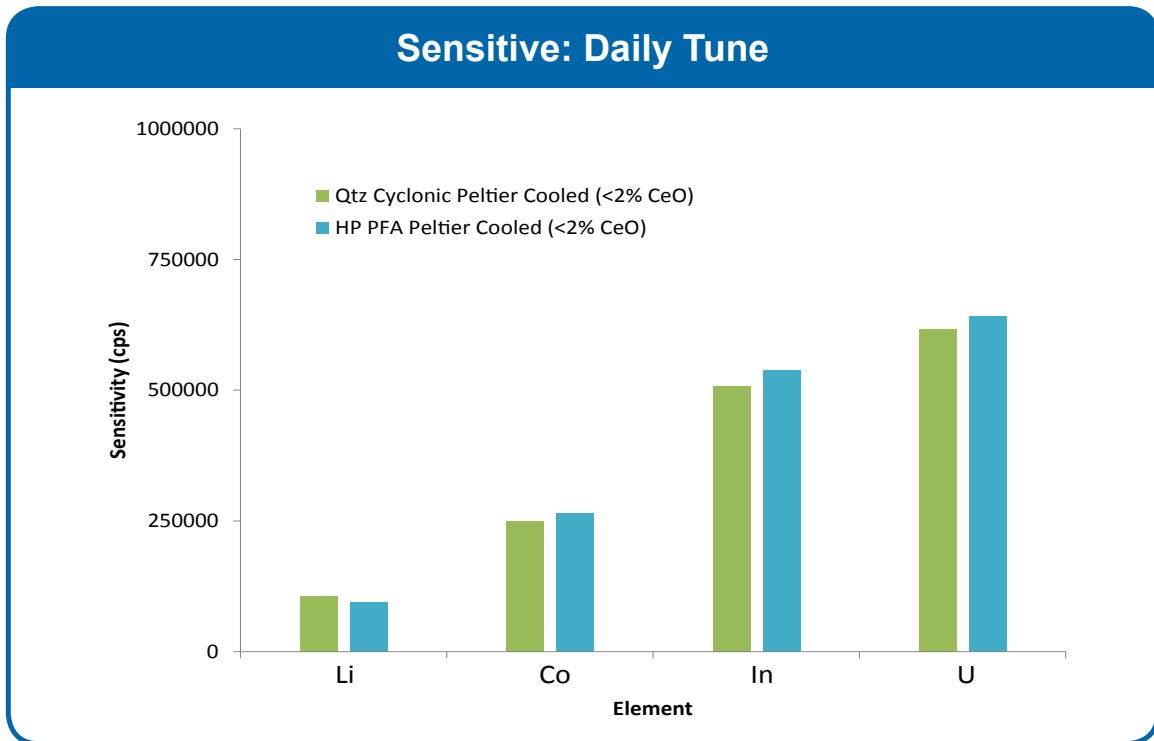


Figure 1. Clean enough to calibrate in the single digit ppt range for Na.

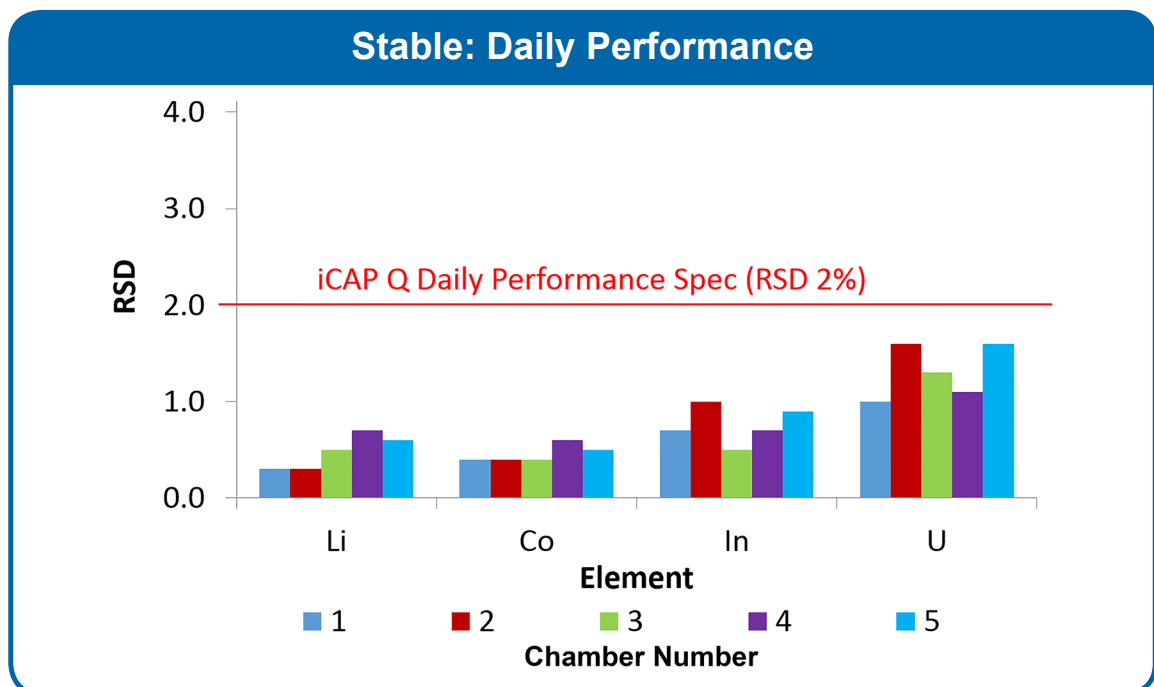
### Benefits

- HF-resistant
- Ultra-low background contamination
- Sensitivity comparable to quartz cyclonic
- Excellent stability (<2% RSD)
- Low oxides (<2% CeO)
- Easy setup and installation
- Integrated operation

## Five HP PFA Chambers Tested for Sensitivity and Reproducibility



**Figure 1.** Standard quartz cyclonic Peltier-cooled chamber compared to new high purity Peltier-cooled HP PFA chamber for a 1ppb solution.



**Figure 2.** All HP PFA chambers pass the iCAP Q daily performance stability specification of <2%.

## 10ppt Spike Recovery (UPDIW)

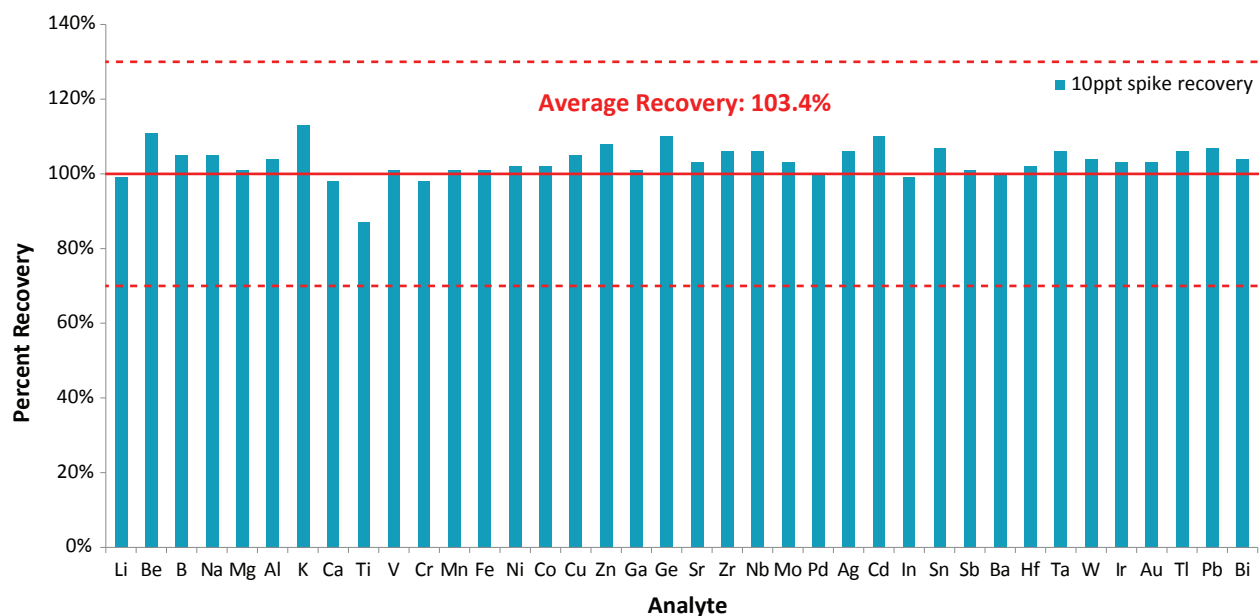


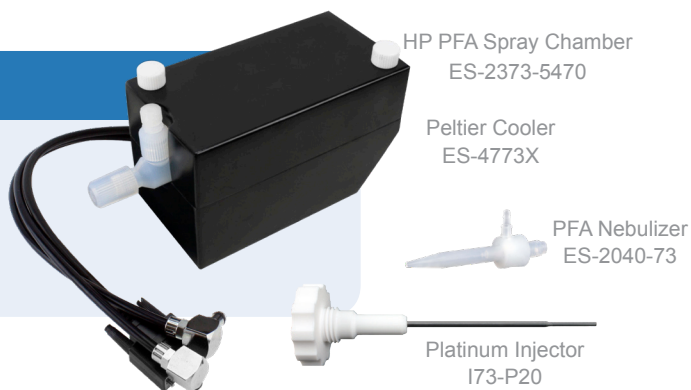
Figure 3. Accurate spike recovery at 10ppt illustrates low blanks with the high performance kit.

## iCAP Q Sample Introduction Kits

### Part Number: PFA-SK-73S

Semiconductor high performance HF-resistant sample introduction system for iCAP Q

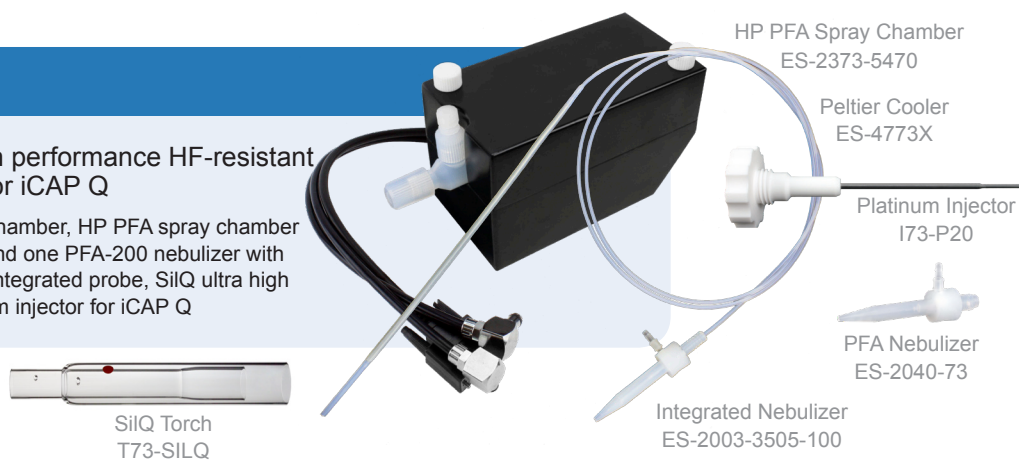
Includes: Peltier cooler for HP PFA chamber, HP PFA spray chamber and endcap, PFA-ST nebulizer, and 2mm platinum injector for iCAP Q






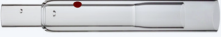

### Part Number: PFA-SK-73SC

Complete semiconductor high performance HF-resistant sample introduction system for iCAP Q

Includes: Peltier cooler for HP PFA chamber, HP PFA spray chamber and endcap, one PFA-ST nebulizer, and one PFA-200 nebulizer with 100cm self-aspiration capillary with integrated probe, SiIQ ultra high purity quartz torch, and 2mm platinum injector for iCAP Q



## iCAP Q Semiconductor Kit Spares and Consumables

Name	Description	Part Number	
Peltier Cooler	Peltier-cooler for HP PFA chamber Thermo iCAP Q (without HP PFA spray chamber)	ES-4773X	
Nebulizer with Integrated Probe	PFA MicroFlow nebulizer, 200 µL/min with integrated autosampler probe with Ultem reinforcement for ESI SC autosampler.	ES-2003-3505-100	
PFA-ST Nebulizer	PFA-ST MicroFlow nebulizer for Thermo iCAP Q. Includes PFA gas line and two capillaries (100µl/min & 400µl/min).	ES-2040-73	
SilQ Torch	Demountable torch, ultra high purity quartz, SilQ.	T73-SILQ	
HP PFA Spray Chamber	47mm HP PFA spray chamber and endcap. Includes ES-2044-0012 threaded drain line.	ES-2373-5470	
Platinum Injector	2mm platinum injector for iCAP Q.	I73-P20	