Conclusions

This work has demonstrated the ability of the NexION ICP-MS, combined with a Titan MPS microwave, to effectively analyze hops (as a surrogate for cannabis) for both nutritional and toxic elements. Analyses are accomplished in both Collision and Standard modes and require only 100 seconds per sample. The accuracy of the applied method was previously validated by analyzing a variety of NIST™ plant materials[1].

References

1. Bosnak, C., Pruszkowski, E., *"The Determination of Toxic, Essential, and Nutritional Elements in Food Matrices Using the NexION 300/350 ICP-MS",* PerkinElmer Application Note.

Consumables Used

Component	Description	Part Number
Sample Uptake Tubing	0.38 mm id (green/orange), PVC, flared, 2-stop	N0777042
Drain Tubing	1.30 mm id (gray, gray), Santoprene, 2-stop	N0777444
Internal Standard Addition Tee	Tee for on-line addition of internal standard	N0777295
Internal Standard Uptake Tubing	0.25 mm id (red/orange), PVC, flared, 2-stop	N0773111
Multielement Standard Solution	100 mg/L Ag, Al, As, Ba, Ve, Ca, Cd, Co, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, Pb, Sb, Se, Sn, Sr, Tl, V, Zn	N9301721 (125 mL)
Multielement Salt Solution	1000 mg/L Ca, Mg, Na, K	N9307805 (125 mL)
Mercury Solution	10 mg/L Hg	N9300253 (125 mL)
Internal Standard Solution	Sc (100 mg/L), Ge (50 mg/L), and In, Rh, Tb (1 mg/L)	N9308592 (125 mL)
Pure-Grade Au Standard	1000 mg/L	N9303728 (125 mL)
Autosampler Tubes	Conical, metal-free, sterile	N0776118 (15 mL) N0776116 (50 mL)

PerkinElmer, Inc.
940 Winter Street
Waltham, MA 02451 USA
P: (800) 762-4000 or
(+1) 203-925-4602
www.perkinelmer.com

PerkinElmer®

012267B_01 PKI