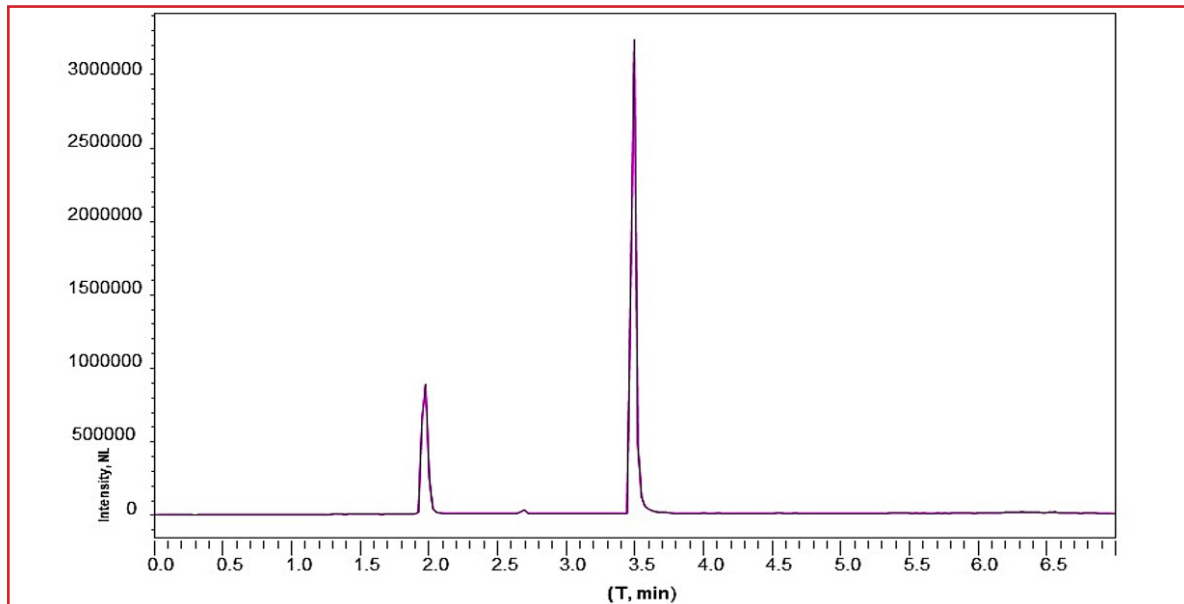




## LC-MS Separation of Kratom and its Metabolite on HALO® C18, 2 µm

Application Note: 204-TOX



The 2 µm HALO® C18 is an ideal choice for analysis of kratom and its metabolite. Kratom is an herbal extract that comes from the leaves of an evergreen tree (*Mitragyna speciosa*) grown in Southeast Asia. Believed to act on opioid receptors, kratom has been used by people to mitigate the symptoms of opioid withdrawal. However, studies on the effects of kratom have identified many safety concerns and no clear benefits, and kratom is not currently regulated by the United States.

### TEST CONDITIONS:

**Column:** HALO 90 Å C18, 2 µm, 2.1 x 50 mm

**Part Number:** 91812-402

**Mobile Phase A:** Water/0.1% Formic acid

**Mobile Phase B:** ACN/0.1% Formic acid

**Gradient:**

Time	%N=B
0.0	10
4.00	95
5.00	95
5.01	95
7.00	END

**Flow Rate:** 0.4 mL/min

**Initial Pressure:** 315 bar

**Temperature:** ambient

**Injection Volume:** 2 µL

**Sample Solvent:** 95/5 ACN/Water

### MS CONDITIONS:

LCMS system: Shimadzu LCMS-2020

Detection: +ESI MS

Spray voltage: 4.50 kV

Drying line temp: 300 °C

Heat Block: 450 °C

### PEAK IDENTITIES:

1. 7-OH Mitragynine (MH+=415.502 g/mol)
2. Mitragynine (MH+=399.453 g/mol)

