

# APPLICATION NOTE

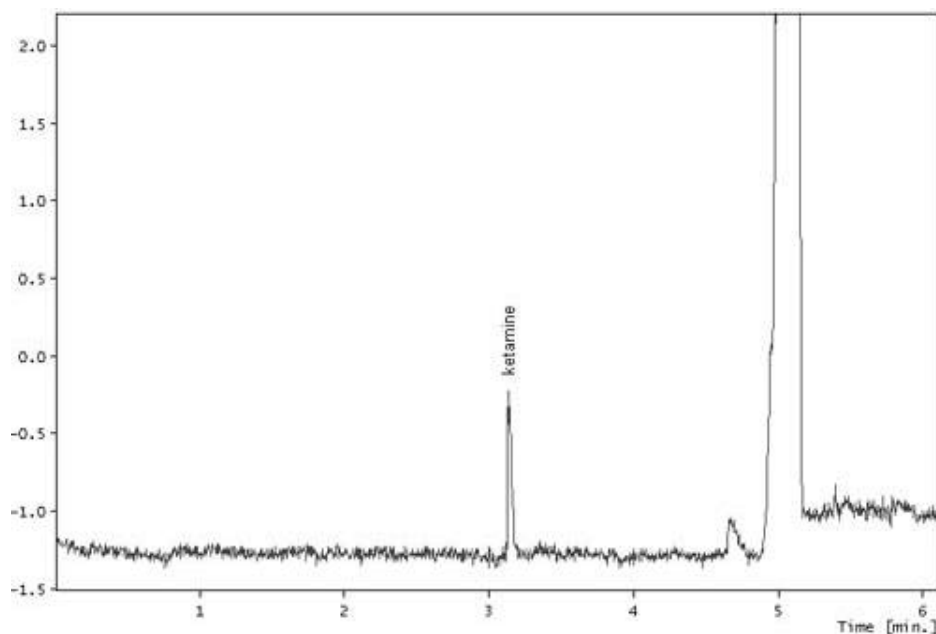
**Application Note :** 013

**Title of application :**

Detection of Ketamine as a Drug of Abuse from urine sample

**Area of application :**

Drug analysis/Biomedical analysis



**Conditions :**

Buffer	KET-01 (20 mM), pH= 5.0;
Sample	Urine sample containing 1 mg/L ketamine;
Capillary	50 $\mu$ m i.d, 70 cm length;
Injection mode	Hydrodynamic injection;
Separation setting	+ 20 kV
Instrument used	CE-L1, UV detection at 210 nm

**Description :**

Detection of ketamine as an illicit drug from body fluids was commonly conducted using GC, GC/MS, LC or LC/MS. Apart from involving bulky and costly instrumentation, chromatographic analysis may also be complicated by the presence of interference due to the endogenous components in the sample matrix. In contrast, under the given CZE separation condition, ketamine was measured as the only component ahead of EOF, with all the endogenous compounds migrating near EOF because of their electrical neutrality. The excellent separation power, coupled with its operation simplicity, make CE-L1 a preferred alternative in the determination of ketamine and other illicit drugs. It is especially useful for drug regulatory agencies and law enforcement bodies as a routine means of drug screening.