

## Analytical Data Sheet

Lot number

**1063642**

not for drug use

Catalog number	N-1000.0025
Product number	4013467.0025
Product	<b>Leupeptin</b> Ac- Leu- Leu- Arg- aldehyde · sulfate salt
Molecular formula	2 C <sub>20</sub> H <sub>38</sub> N <sub>6</sub> O <sub>4</sub> · H <sub>2</sub> SO <sub>4</sub>
Relative molecular mass	951.20

Tests	Results
Appearance	white lyophilisate
Appearance of solution	clear, colorless solution (25 mg/mL in water)
Identification (ESI-MS)	m = 426.6u (average mass)
Specific optical rotation	$[\alpha]_D^{24} = 84.1^\circ$ (0.1% in water)
Purity (HPLC)	98.2% (TEAP)
Related impurities (HPLC)	0.4% Ac-Leu-Leu-D-Arg-aldehyde (sum of 3 peaks (isomers))
Assay (elemental analysis)	93.7% (Nth 17.67%, Nfd 16.56%)
Water content (KF coulometric)	4.5%
Elemental content (AAS)	15mg/kg sodium
Sulfate content (IC)	9.4%
Residual organic solvents (GC)	ethylacetate not det. n-butanol 80 mg/kg diisopropyl ether not det. DMF 70 mg/kg ethanol 200 mg/kg isopropanol not det. methanol 190 mg/kg toluene not det.
Trace metals (ICP-MS)	< 0.1 mg/kg palladium

Latest update: January 11, 2016

**Analytical Data Sheet**  
Lot number **1063642**