

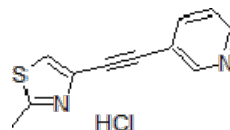
# Certificate of Analysis



## Product Identification

Catalog number	HB0431
Compound name	MTEP hydrochloride
Chemical name	3-((2-Methyl-1,3-thiazol-4-yl)ethynyl)pyridine hydrochloride
Batch number	E0468-3-1
Batch molecular formula	$C_{11}H_8N_2S \cdot HCl \cdot 0.1H_2O$
Batch molecular weight	238.52

## Chemical Structure



Method	QC requirement	QC Result
HPLC	HPLC shows more than 98% purity by RP analysis	Meets specification: >99% by HPLC
NMR	300MHz $^1H$ spectrum in DMSO confirms structure and shows <1% of any other impurity	Meets specification
Mass spectrum	Electrospray positive analysis shows mass ion corresponding to $[M+H]^+$	Meets specification: Mass ion: 201.0
Microanalysis	Elemental analysis is within 0.4 of expected result for each element tested	Meets specification: analysis fits for batch molecular formula
TLC	Analysis using a solvent ratio of 1:1 EtOAc / hexane + 1% $Et_3N$ shows a single spot	Meets specification: $R_f=0.20$
Physical appearance	White to cream solid	Meets specification: cream Solid
Solubility	Soluble in water to 100 mM	Meets specification

## Biological validation