

Certificate of Analysis

IUPAC 3-(difluoromethyl)-1-methyl-1H-pyrazole-5-carboxylic acid

 $\begin{tabular}{lll} \textbf{Molecular Weight} & 176.12 \\ \textbf{Molecular Formula} & C_6H_6F_2N_2O_2 \\ \textbf{Physical State} & Solid \\ \textbf{Storage} & -20 \ ^{\circ}\text{C} \\ \end{tabular}$

Expiration Date Lot Number

One year from date of receipt

Analysis	Specification	Result
Physical Examination	White Solid	PASS
TLC	Ninhydrin: negative	
	Iodine: one major spot	
	Phosphorus: positive	PASS
	Charring: negative	
	Water dip: one major spot	
Chemical Purity (HPLC)	<mark>>97%</mark>	PASS
Mass Spectroscopy	$[M+H]^+ = 177.120 \pm 1 \text{ amu}$	$[M+H]^+ = 177.13$
1H HNMR	Consistent with structure	PASS

Approved by: