Chem-Impex International, Inc.

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935 Dillon Drive 825 Dillon Drive

Wood Dale, IL 60191 Wood Dale, IL 60191

Certificate of Analysis

Catalogue Number 11436

Lot Number 000672-01389-196-02

Product (2S,4S)-4-Fluoro-pyrrolidine-2-carboxylic acid

cis-4-Fluoro-L-Pro-OH

cis-4-Fluoro-L-proline

CAS Number 2438-57-5 Molecular Formula C₅H₈FNO₂

Molecular Weight 133.12

Appearance White to pale yellow solid

Optical Rotation [a]_D^{22.6} = -44.0° (C=1.16 in H₂O)

Analysis by Mass Spectra Conforms to standard, $[M+H]^+ = 134.1$ ESI Positive

13C NMR Conforms to structure
19F NMR Conforms to structure
1H NMR Conforms to structure

Purity> 97% (NMR)StorageStore at 0-8 °C

Additional Information Optical purity of starting material was assessed to 99+% by Chiral

HPLC.

Remarks See material safety data sheet for additional information

For laboratory use only

The foregoing is a copy of the Certificate of Analysis as provided by our supplier

Bala Kumar

Quality Control Manager