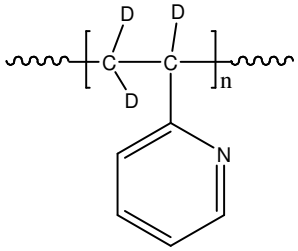
Sample Name:
Deuterated (d3) Poly(2-vinyl pyridine)
(ethyl groups are deuterated)

Sample #: **P18877-d3P2VP**

Structure:



Composition:

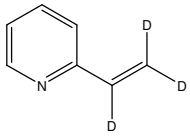
Mn x 10^3	PDI
27.0	1.10

Synthesis Procedure:
The polymer was prepared by anionic living polymerization process.

Characterization:
By size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple detectors from Viscotek Co.

Solubility:
Polymer is soluble in DMF, THF, toluene, methanol, ethanol and $CHCl_3$. It precipitates from water and hexanes, ether.

Structure: For the monomer used

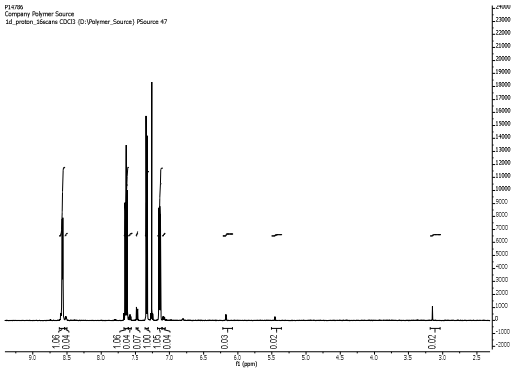


$C_7H_4D_3N$
Mol. Wt.: 108.16
2-vinylpyridine-d3 (P14786)

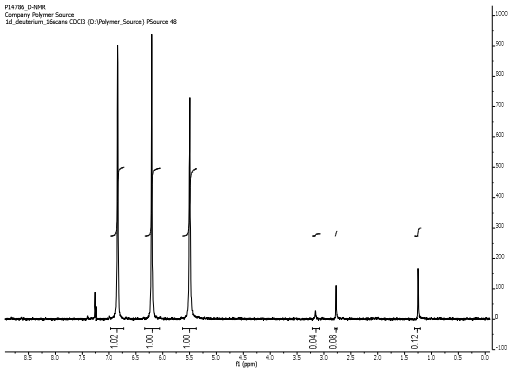
Characterization:

CAS	352530-46-2
D atom purity	98 %
Chemical Purity	90 %
2-Ethynylpyridine (impurity)	6 %
2-Ethylpyridine-d5 (impurity)	4%

^{1}H NMR of P14786



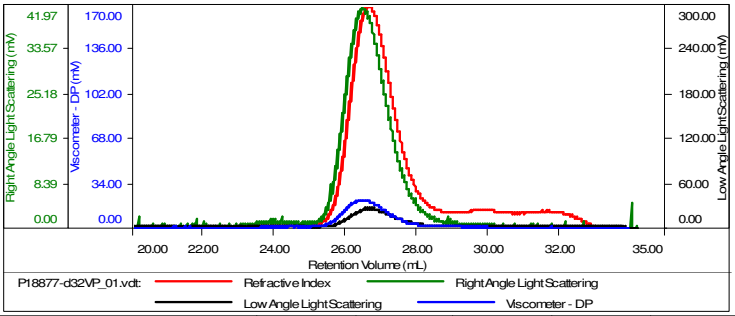
^{2}D NMR of P14786



SEC elugram:

Sample ID: P18877-d32VP

Concentration (mg/mL)	2.8139
Sample dn/dc (mL/g)	0.1670
Method File	PS80K-0903-2014-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersi	Intrinsic Viscosity (dL/g)
P18877-d32VP_01.vdt	27,175	29,865	29,665	1.099	0.2062