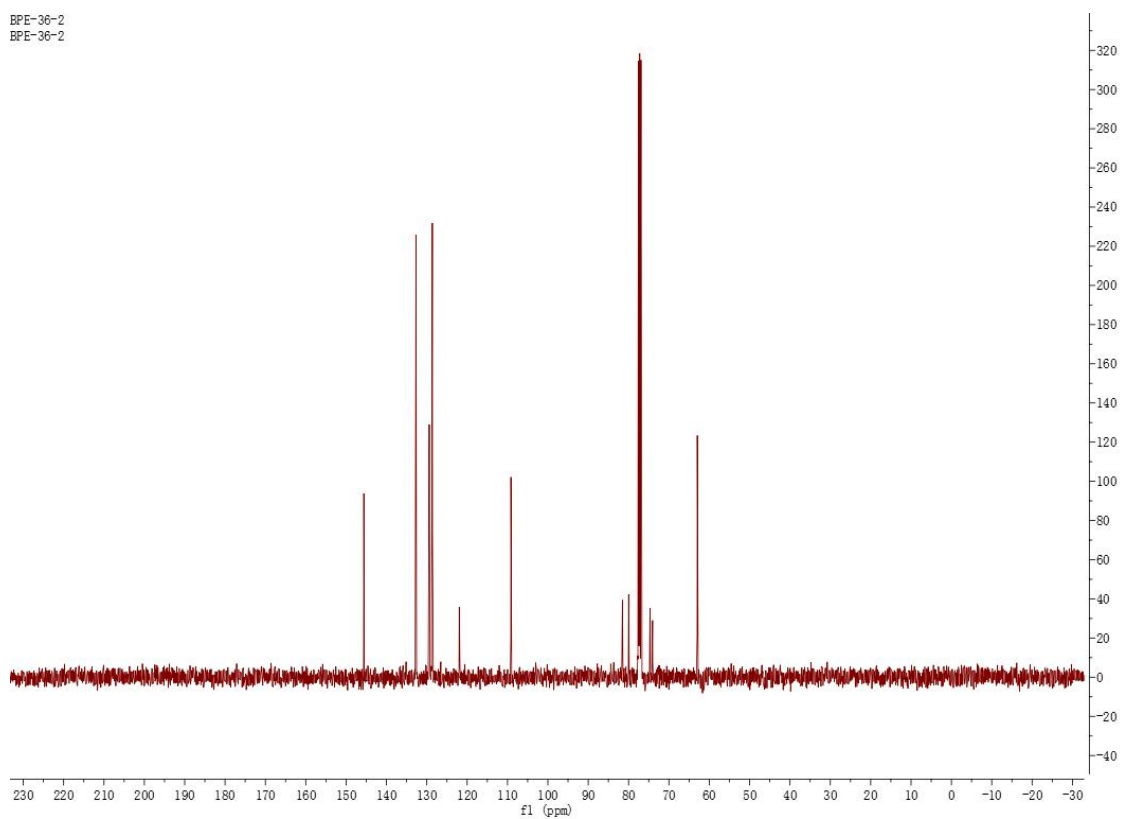


## Supplementary materials

1. NMR spectra (Compound No: BPP-36-2 for Polyacetylene 1, BPP-31-1 for Polyacetylene 2).

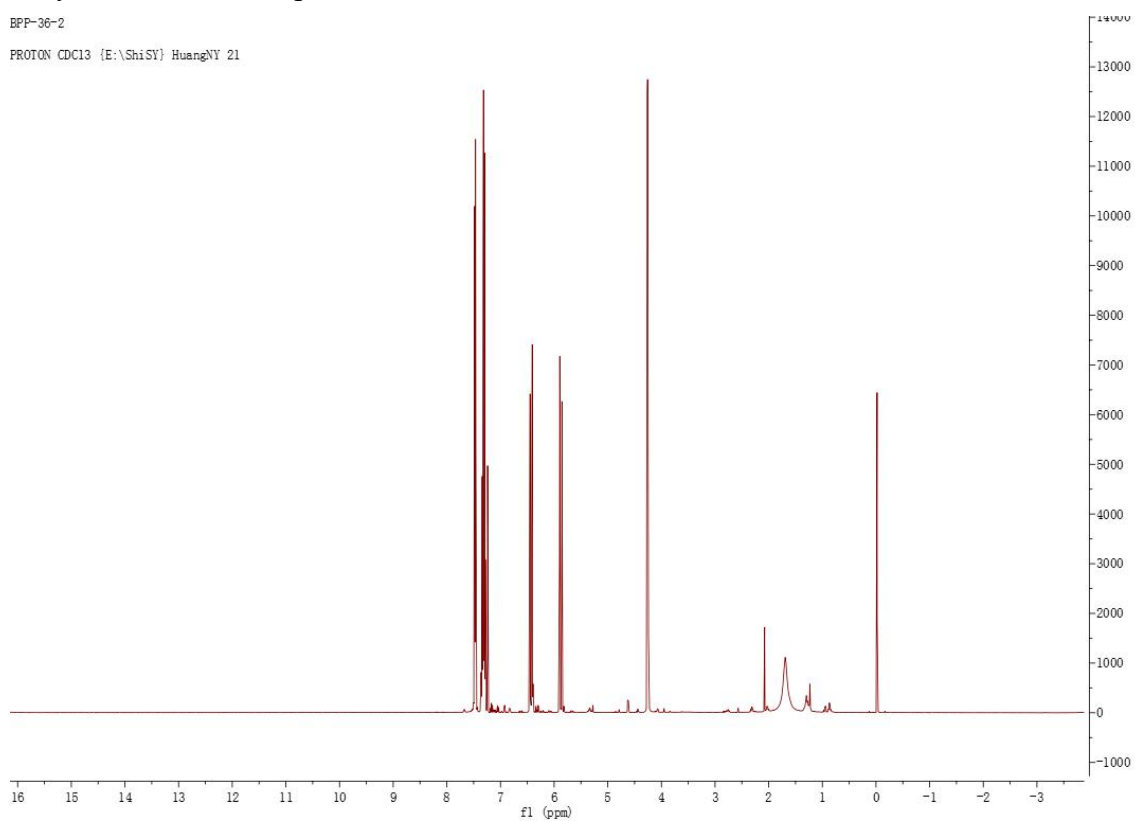
Polyacetylene 1  $^{13}\text{C}$ -NMR spectrum



# Polyacetylene 1 $^1\text{H}$ -NMR spectrum

BPP-36-2

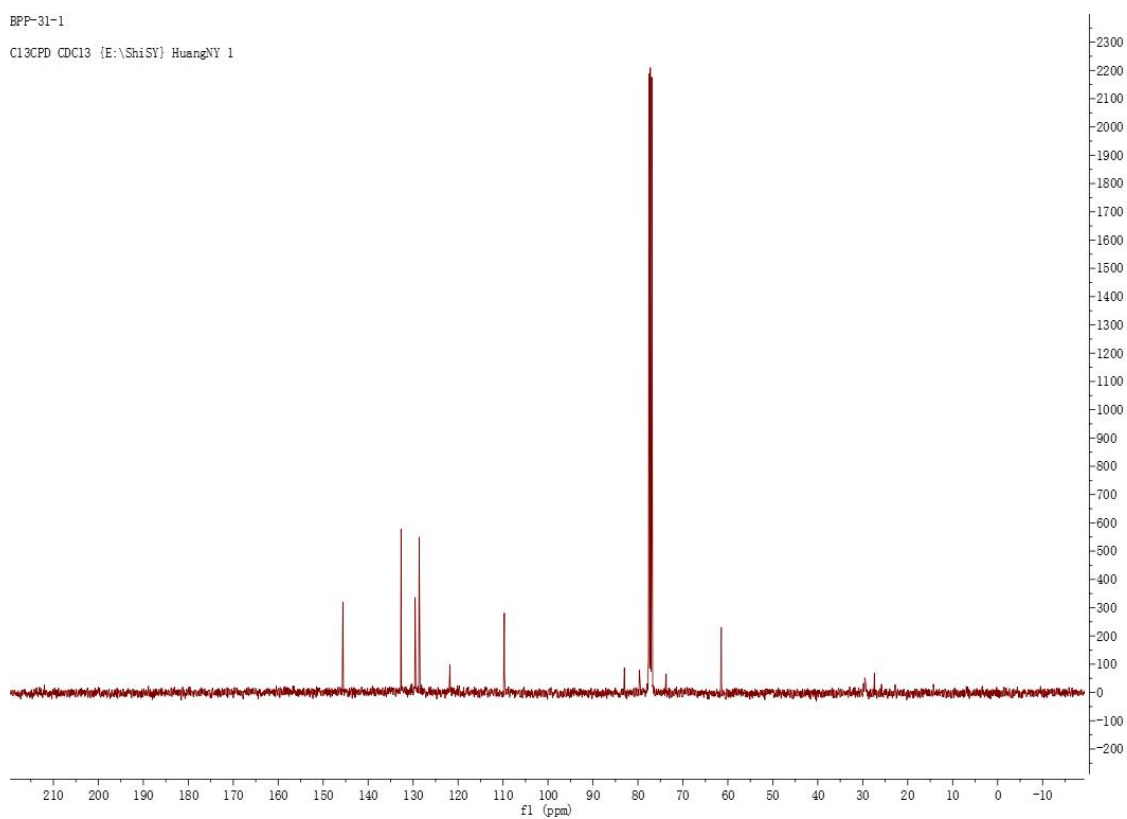
PROTON CDCl3 (E:\ShiSY) HuangNY 21



# Polyacetylene 2 $^{13}\text{C}$ -NMR spectrum

BPP-31-1

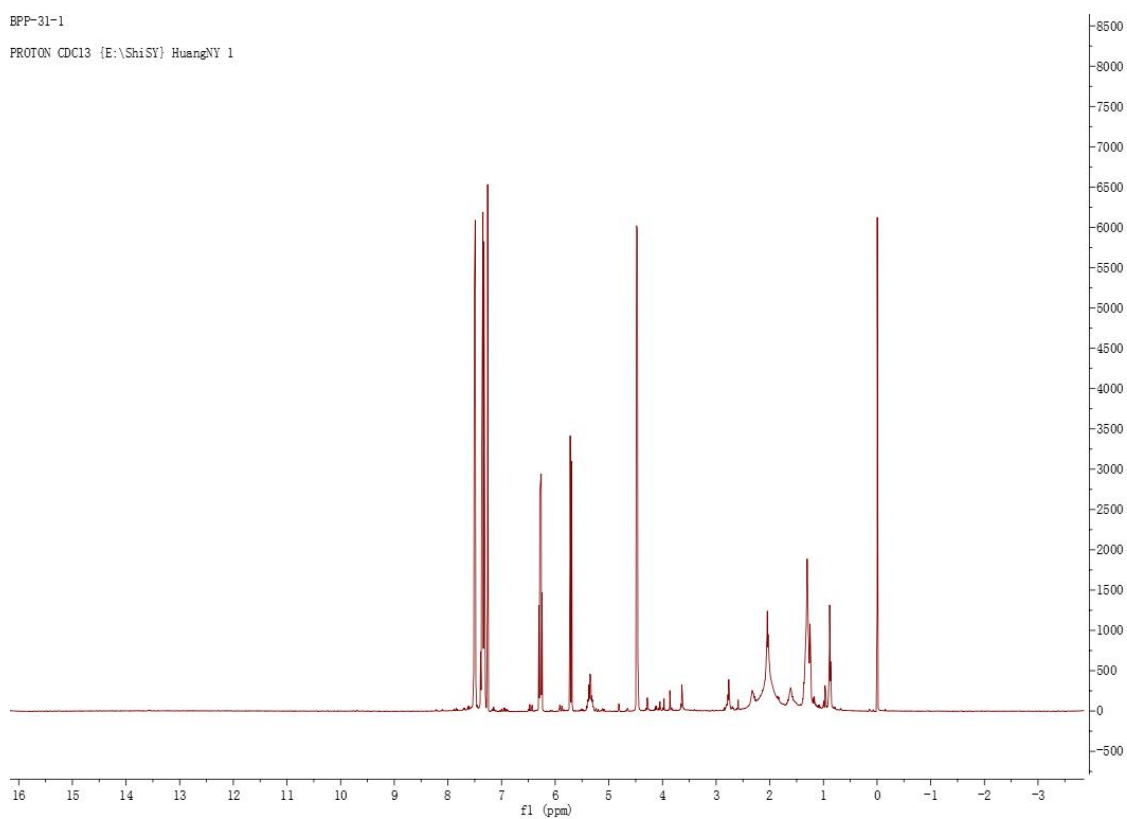
C13CPD CDCl3 {E:\ShiSY\ HuangNY 1



# Polyacetylene 2 $^1\text{H}$ -NMR spectrum

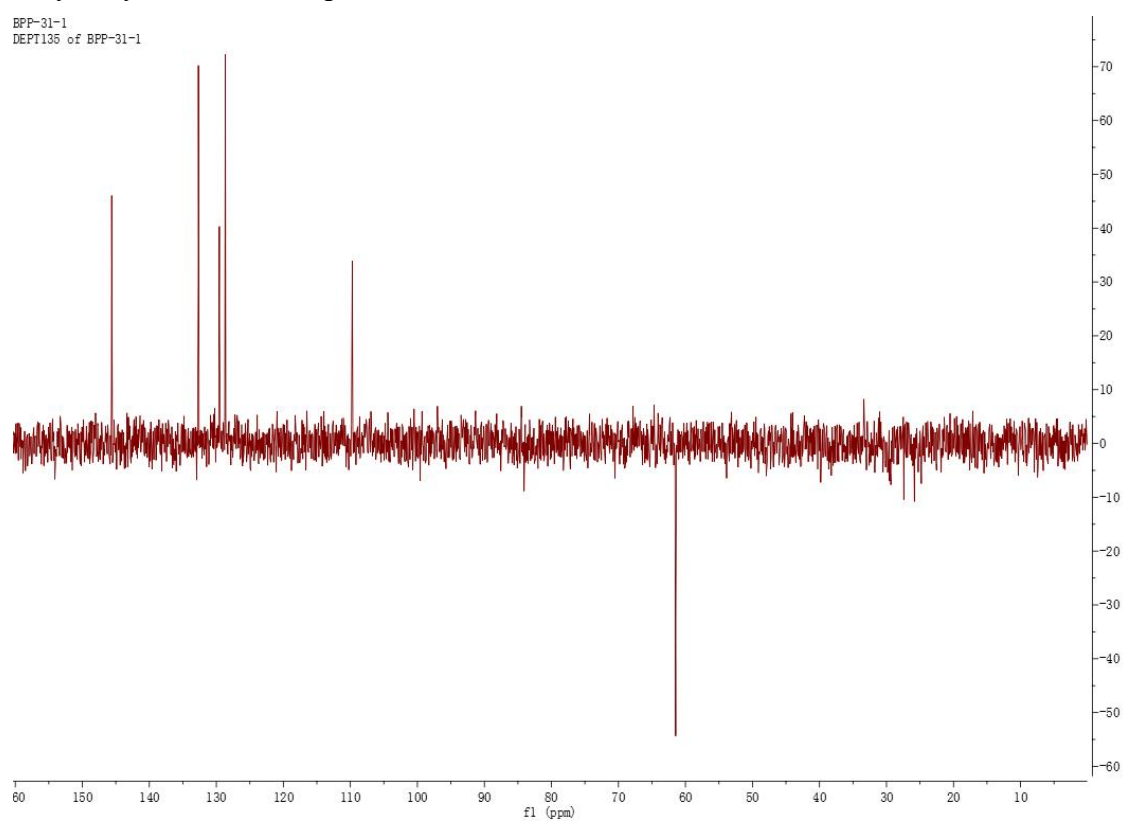
BPP-31-1

PROTON CDCl<sub>3</sub> (E:\ShiSY) HuangNY 1



# Polyacetylene 2 DEPT spectrum

BPP-31-1  
DEPT135 of BPP-31-1



2. The culture medium used for each cell lines.

Human gastric carcinoma HGC-27 cells, human gastric carcinoma BGC-823 cells, human gastric carcinoma NCI-N87 cells, human cervical cancer Ca Ski cells, and human nasopharyngeal carcinoma CNE-2 cells were maintained in RPMI-1640 medium.

Human breast cancer MDA-MB-231 cells, human hepatocellular carcinoma HepG2 cells, human colon cancer HCT-116 cells, human pancreatic cancer PANC-1 cell, human lung cancer A549 cells, human gastric epithelial GES-1 cells, and Madin-Darby canine kidney MDCK cells were maintained in DMEM medium.