

Supporting Information

Synthesis and characterization of chiral PEDOTs enantiomers bearing chiral moieties in side chains: chiral recognition and its mechanism using electrochemical sensing technology

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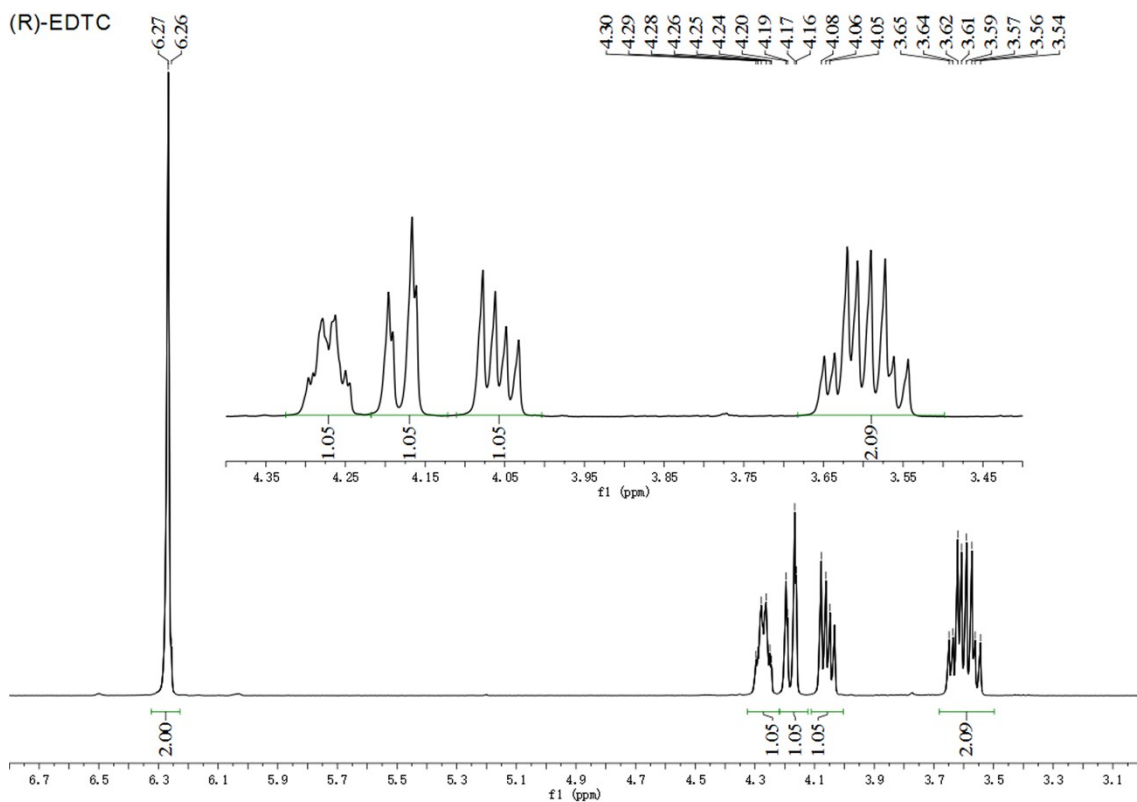


Figure S1. ^1H NMR spectrum of (R)-EDTC

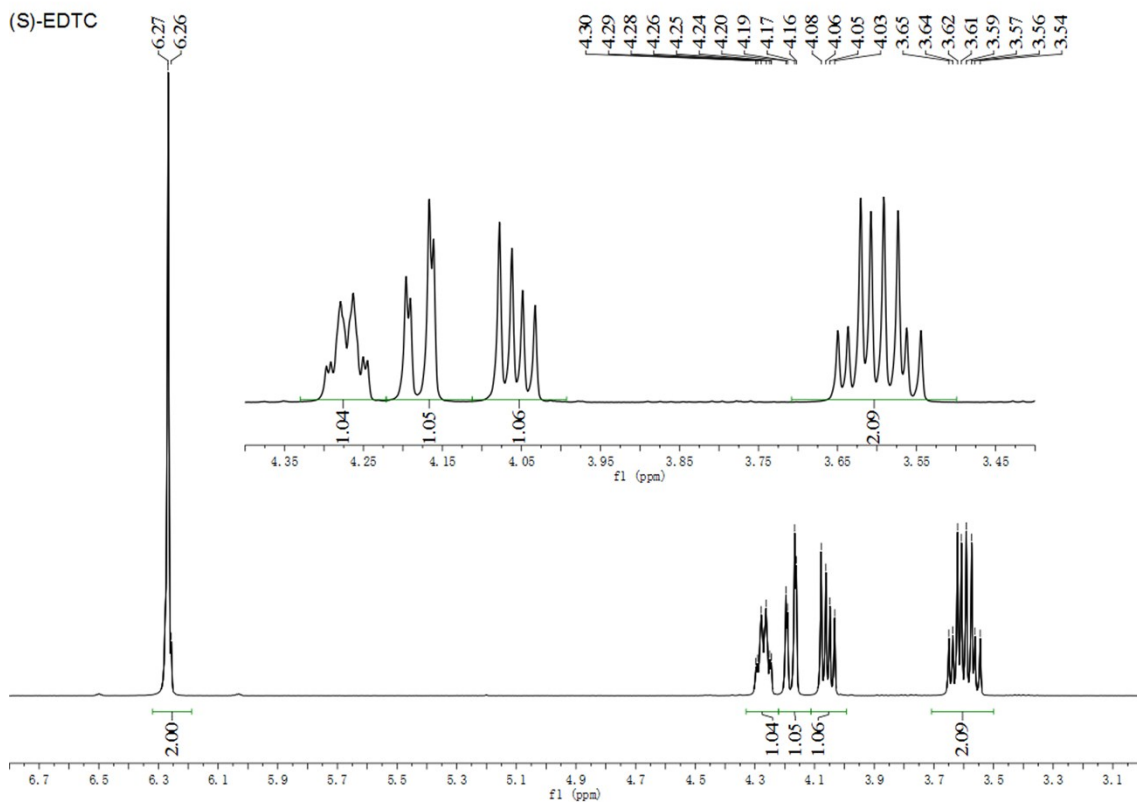


Figure S2. ^1H NMR spectrum of (S)-EDTC

Table S1. Assignment for FT-IR Spectra of (*R*)-EDTC, (*R*)-PEDTC, (*S*)-EDTC and (*S*)-PEDTC.

Band (cm ⁻¹)				Assignment
(<i>R</i>)-EDTC	(<i>R</i>)-PEDTC	(<i>S</i>)-EDTC	(<i>S</i>)-PEDTC	
3111	----	3111	----	ν =C-H
3019, 2995, 2963, 2926	2928	3017, 2997, 2963, 2930	3012	ν CH ₂
1575, 1482	1617, 1479	1581, 1483, 1426	1618, 1511	ν C=C
1374, 1341, 1275	1398, 1313	1375, 1339, 1275	1399, 1329	ν_{as} =C-O-C/ ν C-C
1186, 1137, 1102	1186	1188, 1134, 1099	1171	ν_{as} C-O
1055	1083	1055	1073	ν_s =C-O-C
1021	----	1016	----	δ =C-H
919	----	920	----	γ =C-H
845	875	850	836	ν_s C-O
773	760	775	762	ν C-Cl
689	619	687	617	ν C-S
542	534	538	542	δ C-Cl

ν represents stretching vibration (ν_a symmetrical; ν_{as} asymmetrical), δ in-plane deformation vibration and γ out-of-plane deformation vibration.

Table S2. Thermogravimetric Parameters for (*R*)-PEDTC and (*S*)-PEDTC.

Polymer films	Temperature range (K)	Weight loss (%)
	298-448	3.55
(<i>R</i>)-PEDTC	449-654	37.42
	655-1260	33.72
	298-448	2.44
(<i>S</i>)-PEDTC	449-654	38.65
	655-1260	29.96