

Supporting Information

Computation Section

1. Computation of optical rotation for two diastereomers, *cis* (*4R, 8S*) and *trans* (*4R, 8R*)

Table 1. The computed optical data for *trans* (*4R, 8R*) – enantiomer.

entry	OR	Energy
1	181.71	-771.32079
2	108.10	-771.3192912
3	222.60	-771.3194106
4	142.08	-771.3197426
5	143.53	-771.3179848
6	155.10	-771.3194675
7	64.03	-771.3200188
8	177.30	-771.3177407
9	74.41	-771.3181749
10	189.87	-771.3183581
11	116.45	-771.3183658
12	74.62	-771.318175
13	55.23	-771.3200096
14	89.14	-771.3187781
Sum of OR	+132.9	

Table 2. The computed optical data for *cis* (*4R, 8S*) – enantiomer.

Entry	OR	Energy
1	-23.51	-771.3195611
2	-131.99	-771.3207403
3	144.67	-771.3205974
4	-76.05	-771.3197859
5	-73.70	-771.3183182
6	-57.19	-771.3202697
7	-164.70	-771.3194685
8	36.09	-771.318334
9	103.80	-771.3192806
10	44.95	-771.318179
11	161.07	-771.3187903
12	60.47	-771.3194445
13	62.63	-771.3184976
14	51.85	-771.3191076
15	79.57	-771.3209678
16	27.66	-771.3187731
17	44.92	-771.3196886
18	85.33	-771.3191618
19	-9.39	-771.3194409
Sum of OR	+5.6	

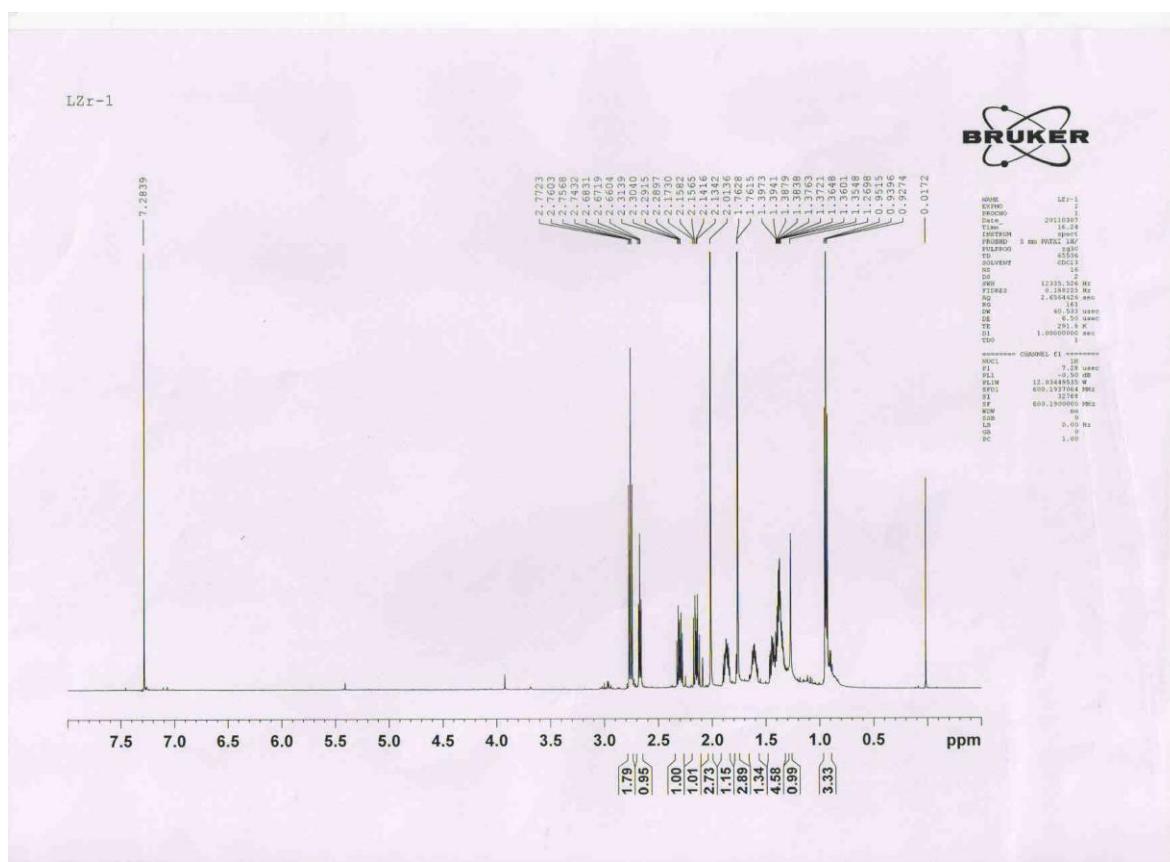
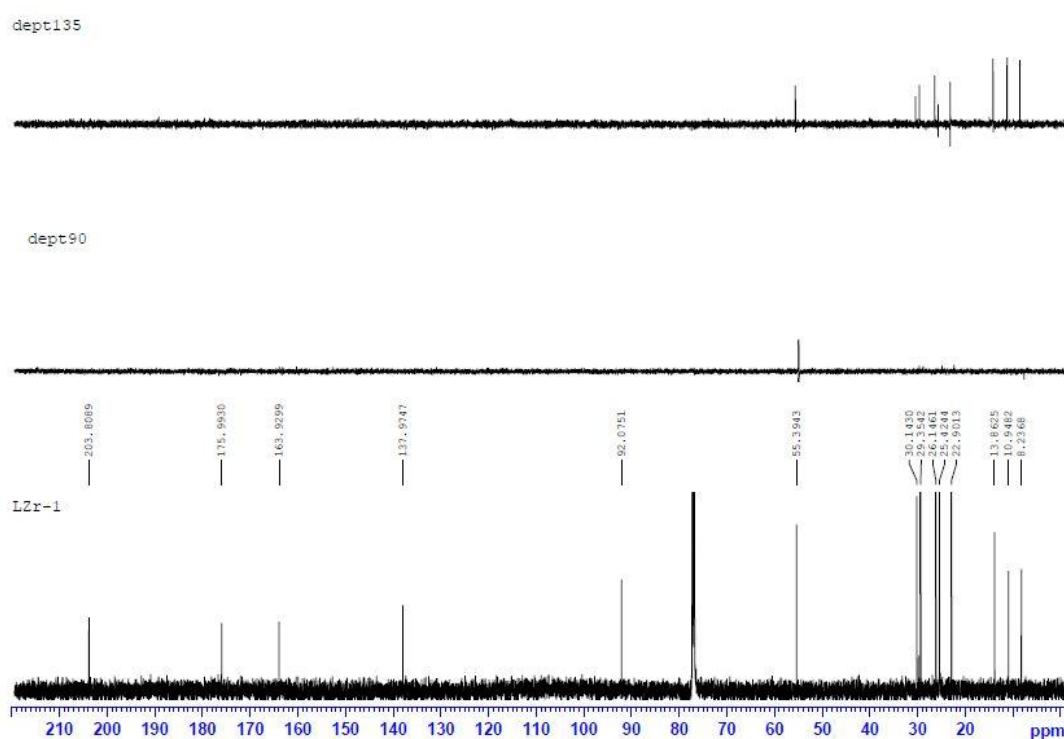
Figure S1. ^1H -NMR spectrum of **1** (600 MHz, CDCl_3).**Figure S2.** ^{13}C -NMR spectrum of **1** (150 MHz, CDCl_3).

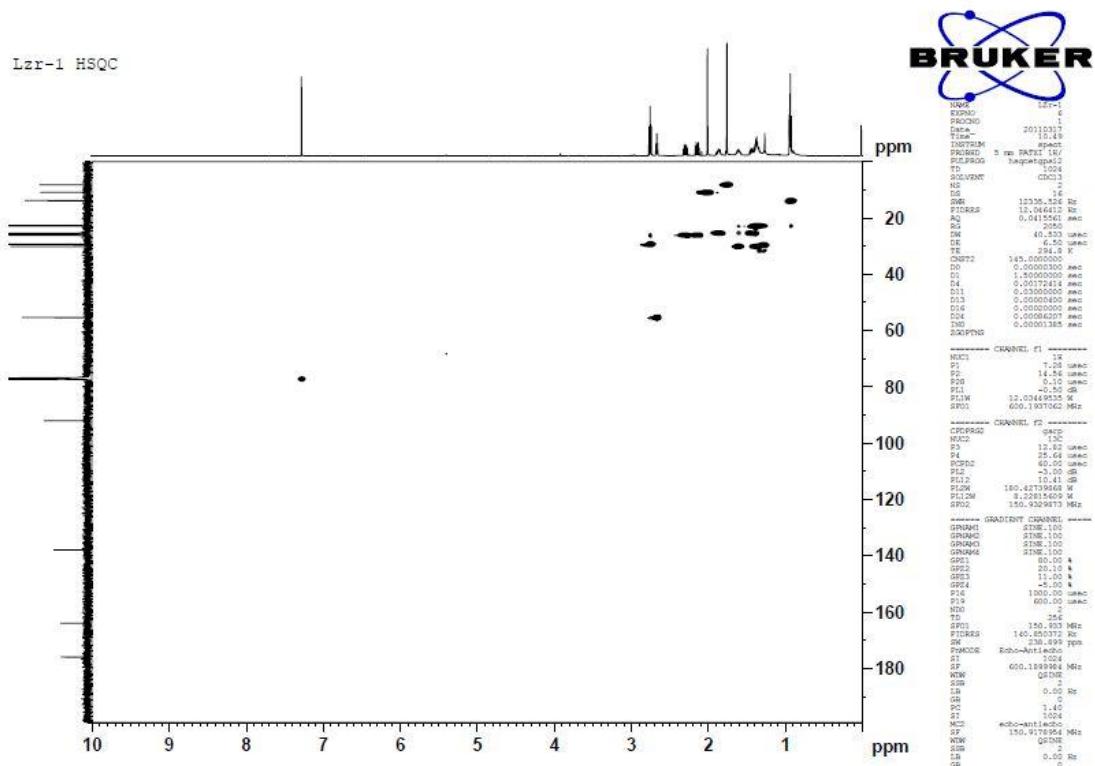
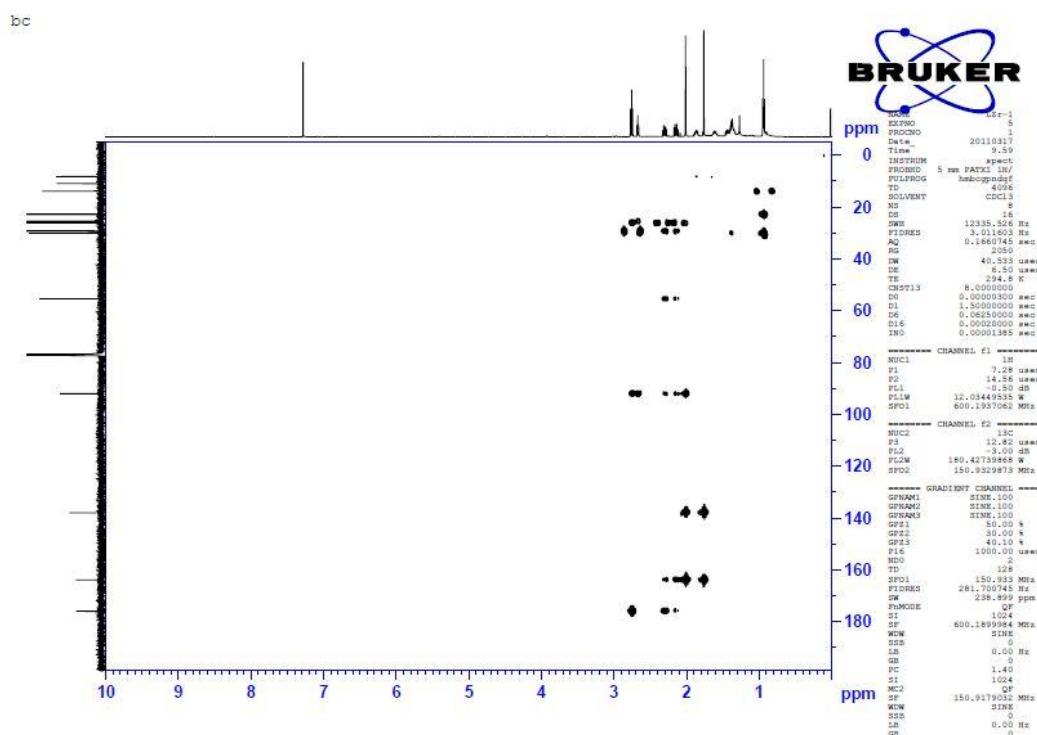
Figure S3. HSQC spectrum of **1** (CDCl_3).**Figure S4.** HMBC spectrum of **1** (CDCl_3).

Figure S5. ^1H , ^1H -COSY spectrum of **1** (CDCl_3).

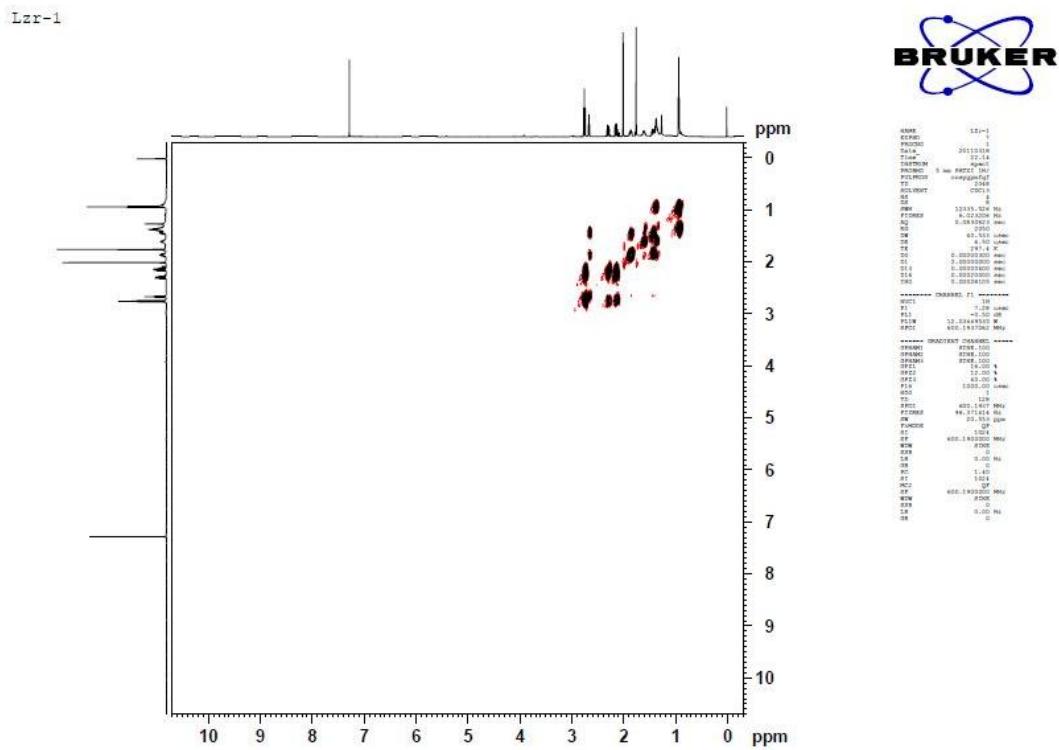


Figure S6. NOESY spectrum of **1** (CDCl_3).

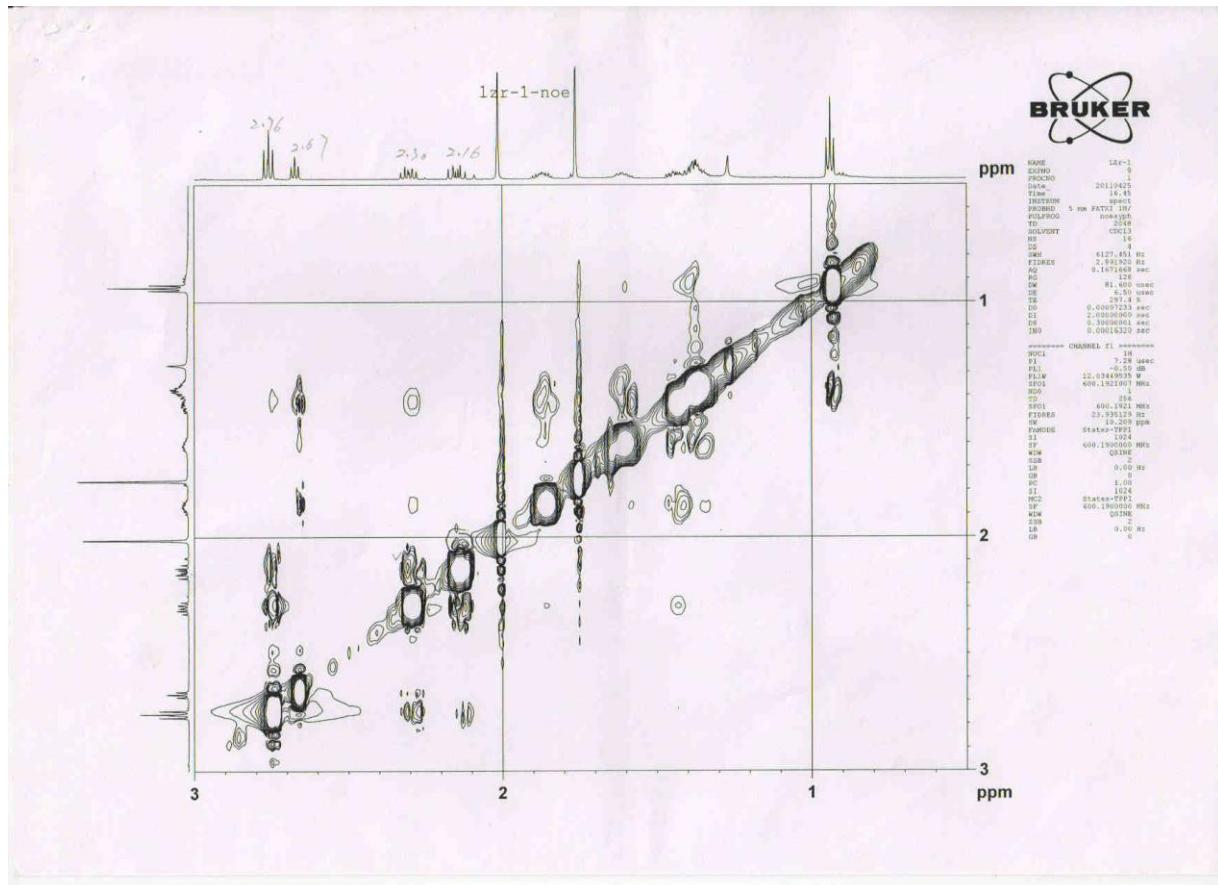


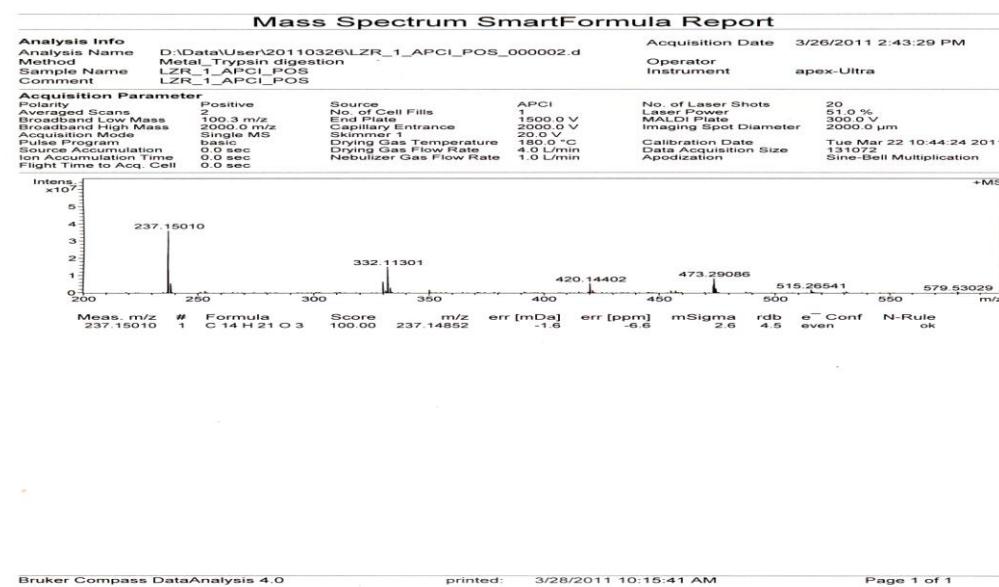
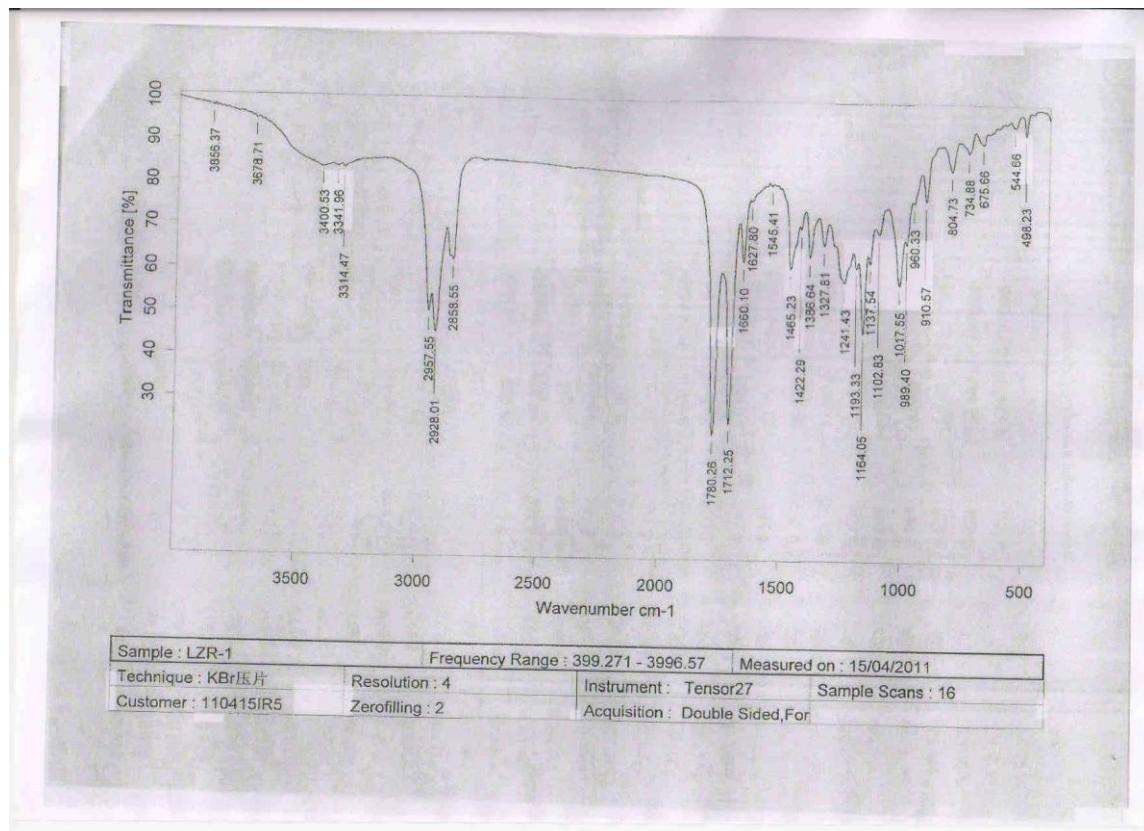
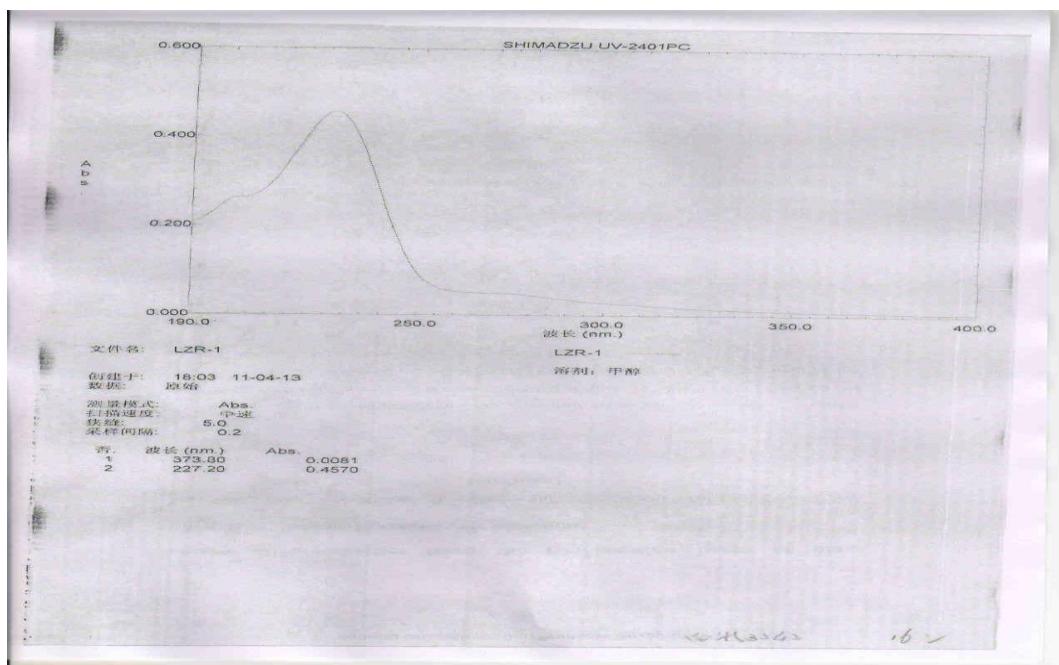
Figure S7. HR-APCI-MS spectrum of **1** (CDCl_3).**Figure S8.** IR spectrum of **1**.

Figure S9. UV spectrum of **1**.**Figure S10.** CD spectrum of (-)-foedanolide (**1a**).