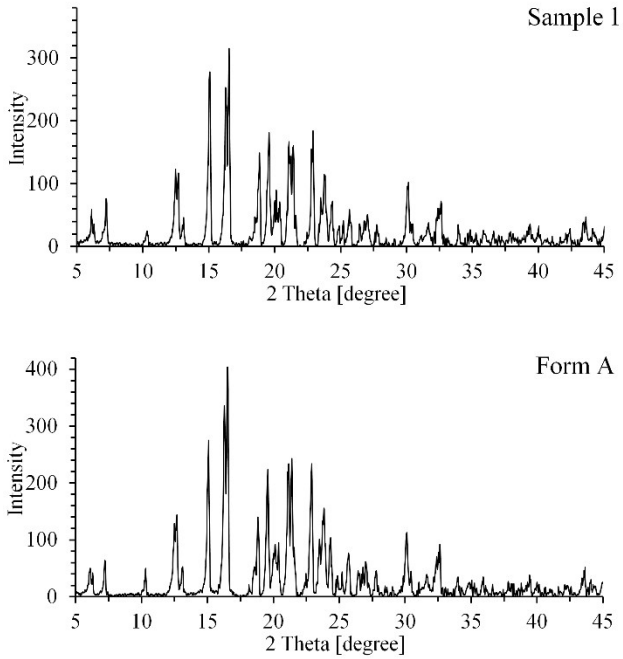
Supplementary Information

Supplementary Experiment 1

PXRD test of amorphous form of loratadine crystallized in isopropyl ether

Approximately 0.2 g amorphous form of loratadine was crystallized from isopropyl ether (40 mL). Powder X-ray diffraction data were collected using an X-ray diffractometer (XRD-6100, Shimadzu Co., Japan) with a Cu Kα radiation source being operated at 40 kV and 30 mA. The powder samples were packed into the sample holder and scanned from 5 to 45° 2θ at a step size of 0.02° with a dwell time of 0.06 s, respectively. Data analysis was performed using JADE software (version 5, Materials Data Inc., Livermore, Canada). And the PXRD patterns are shown in *Supplementary Fig. 1*.



Supplementary Fig. 1. PXRD patterns of sample 1 and A form of loratadine. After amorphous form of loratadine crystallized in isopropyl ether, we gained crystal which have same PXRD with form A.

Supplementary Experiment 2

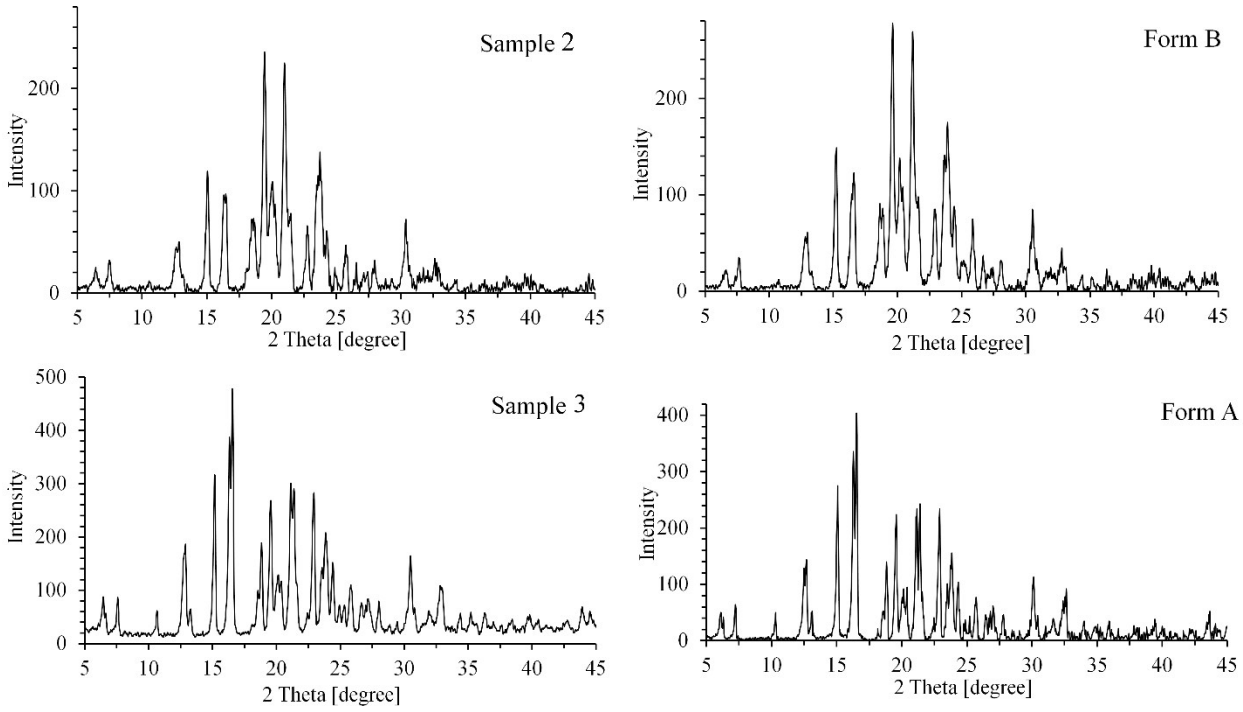
PXRD test of heating residues of DSC

Polycrystalline transform was performed by differential scanning calorimeter (DSC Q20, TA Instruments, Inc., USA). Temperature and enthalpy of DSC were calibrated using indium phase transition (99.99% pure; heat of fusion, 28.45 J/g; melting point, 156.61 °C). Approximate sample was weighted into a standard aluminum pan and sealed with aluminum lid (pan: 900786-901; lid: 900779-901), and another empty aluminum pan was sealed as reference. The reference pan and the sample pan were placed into the DSC furnace. Under a stream of N_2 gas (25 mL/min), the samples were obtained as follow:

Sample 2: The amorphous sample was heated from 25 °C to 125 °C at 0.5 °C/min, then cooled to ambient temperature at 2 °C/min.

Sample 3: The form B sample was ramped to 120 °C at 0.5 °C/min, then cooling to room temperature at 2 °C/min.

Powder X-ray diffraction (PXRD) data were collected using an X-ray diffractometer (XRD-6100, Shimadzu Co., Japan) with a Cu Kα radiation source being operated at 40 kV and 30 mA. After ground into powder, the samples were packed into the sample holder and scanned from 5 to 45° 2θ at a step size of 0.02° with a dwell time of 0.06 s. Data analysis was performed using JADE software (version 5, Materials Data Inc., Livermore, Canada). And the diffraction patterns are shown in *Supplementary Fig. 2.*



Supplementary Fig. 2. The PXRD patterns. Sample 2: The amorphous sample was heated from 25 °C to 125 °C at 0.5 °C/min, then cooled to ambient temperature at 2 °C/min. Sample 3: The form B sample was ramped to 120 °C at 0.5 °C/min, then cooling to room temperature at 2 °C/min.