



UHPLC & HPLC HILIC column  
SPE

# 新世代ヒリックカラム

**iHILIC<sup>®</sup> -Fusion** by HILICON

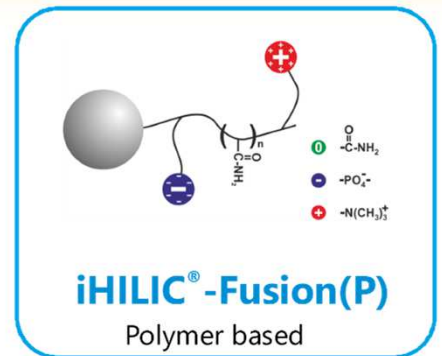
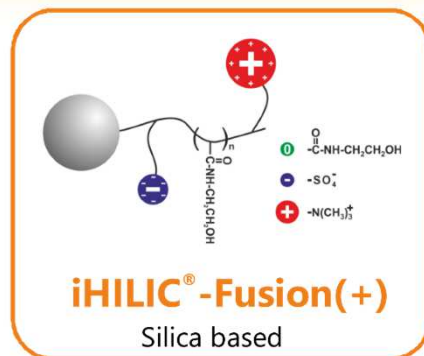
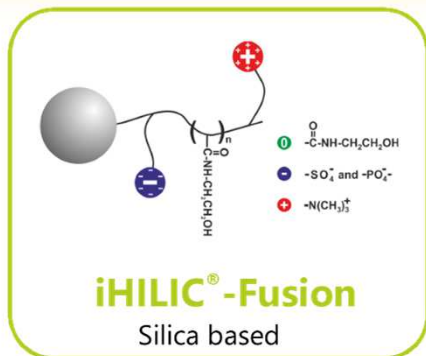


Website: [www.hilicon.com](http://www.hilicon.com)

株式会社 クロマニックテクノロジーズ

# iHILIC<sup>®</sup>-Fusion

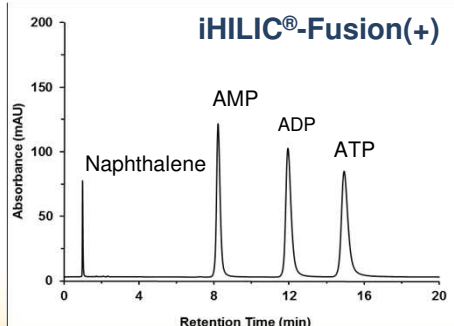
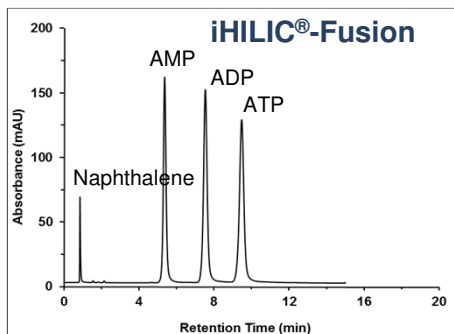
## 3種類の固定相を提供



### Features

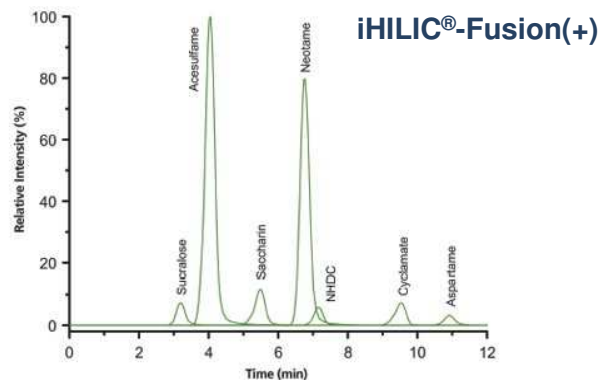
- Charge modulated hydroxyethyl amide/amide HILIC columns
- Three complementary selectivities for separation of polar analytes
- Excellent durability and ultra-low bleeding for LC-MS
- Versatile columns for "Omics" studies
- iHILIC<sup>®</sup>-Fusion and iHILIC<sup>®</sup>-Fusion(+): pH 2-8; 1.8, 3.5, and 5  $\mu$ m
- iHILIC<sup>®</sup>-Fusion(P): pH 1-10; 5  $\mu$ m

### ヌクレオチドの分離



**Column:** 100 × 2.1 mm, 3.5- $\mu$ m 100Å  
**Mobile phase:** A) 100 mM ammonium formate, pH = 5.8 / acetonitrile = 30 / 70  
**Flow rate:** 0.2 mL/min  
**Column temperature:** Ambient  
**Injection volume:** 2  $\mu$ L

### 人工甘味料の分離



**LC-MS-MS system:** Advance UHPLC with a CTC PAL autosampler and Bruker EVOQ<sup>™</sup> Elite triple quadrupole system with electrospray ionization; multiple reaction monitoring mode (MRM) in ESI(+) and ESI(-) was used for selective and sensitive detection, see details in Table.

**Column:** 150 × 2.1 mm, 3.5- $\mu$ m 100Å  
iHILIC-Fusion(+)

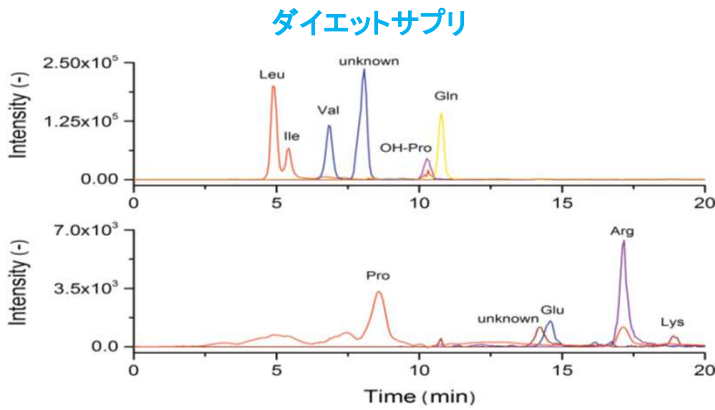
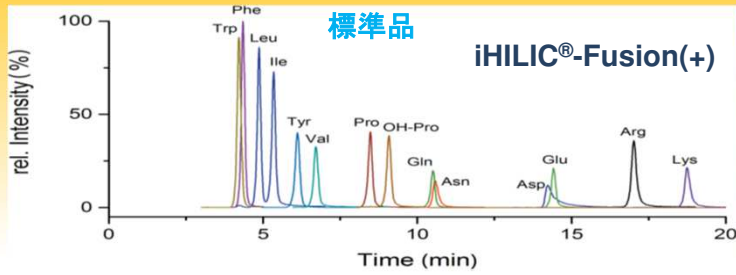
**Gradient elution:** A) acetonitrile; B) 10 mM ammonium formate, pH = 3.5; gradient elution from (95/5) A/B to (84/16) A/B in 8.5 min.

**Flow rate:** 0.3 mL/min

**Column temperature:** 40 °C

**Injection volume:** 5  $\mu$ L

## アミノ酸の分離



**LC-MS System:** Agilent 1100er LC system and Thermo Fisher LTQ™ equipped with a HESI source, operated in positive ionization mode for analysis of standards. For the dietary supplement, an Orbitrap™ Exactive classic equipped with a HESI source and operated in positive ionization mode.

**Column:** 150 × 2.1 mm, 3.5-μm iHILIC-Fusion(+)

**Gradient Elution:** A) acetonitrile–water–1 M ammonium acetate, pH 5.75 (90:5:5); B) water–acetonitrile–1 M ammonium acetate, pH 5.75 (90:5:5); 0–0.5 min (90:10) A–B; 0.5 to 25 min, gradient elution from (90:10) A–B to (60:40) A–B.

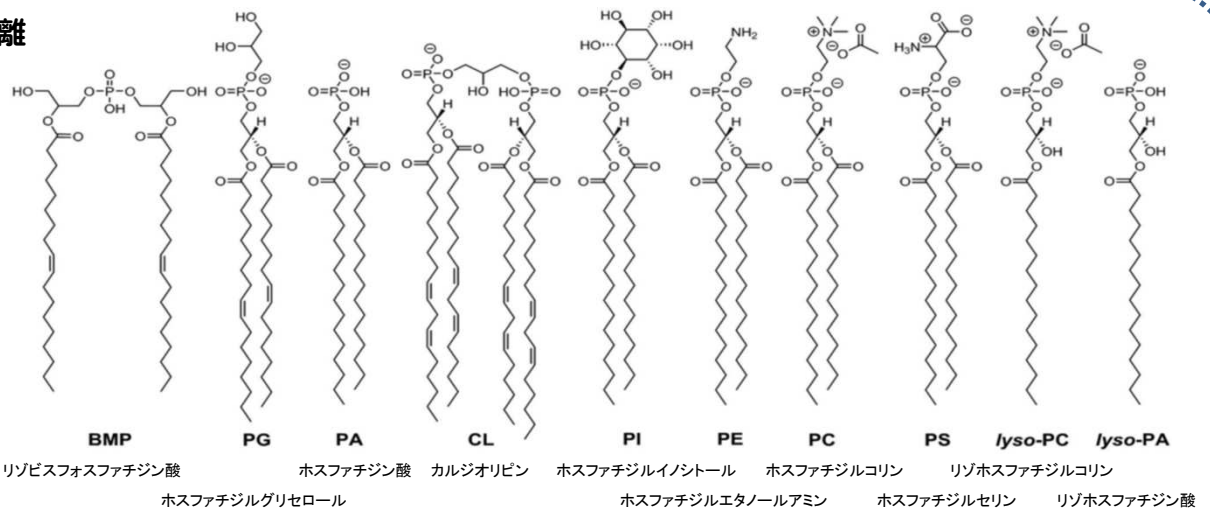
**Flow Rate:** 0.3 mL/min

**Column Temperature:** 40 °C

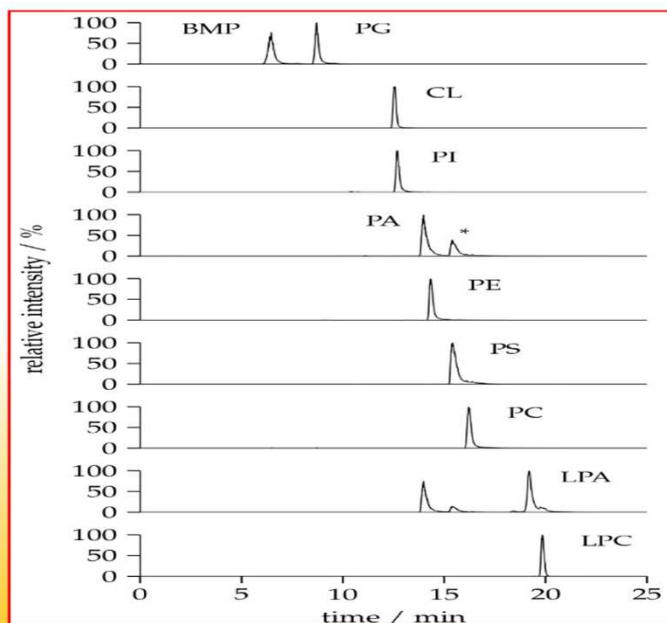
**Injection Volume:** 5 μL

**Amino Acids:** Arginine, asparagine, aspartic acid, glutamic acid, glutamine, hydroxyl-proline, isoleucine, leucine, lysine, phenylalanine, proline, tryptophan, tyrosine, and valine. 50 μM of each amino acid was dissolved in water–acetonitrile (25:75) solution.

## リン脂質の分離



### iHILIC®-Fusion



### リン脂質の化学構造

**LC-MS system:** Thermo Scientific Ultimate 3000 HPLC system coupled to a Q Exactive™ Plus Hybrid Quadrupole-Orbitrap™ mass spectrometer, which is equipped with a HESI II source and operated in negative ionization mode (ESI-).

**Column:** 150 × 2.1 mm, 3.5 μm 100 Å iHILIC-Fusion.

**Eluent:**

A) ammonium acetate solution (35 mM, pH 5.75) and acetonitrile (95:5, v/v);

B) acetonitrile.

**Gradient elution:** 0–0.5 min, 97% B; 0.5–26.5 min, from 97% to 75% B; 27–33 min, 60% B; 35–45 min 97% B.

**Flow rate:** 0.3 mL/min

**Column temperature:** 40 °C

**Injection volume:** 10 μL

# 【 iHILIC-Fusion カラムおよびSPEカートリッジの価格表 】

P/N	iHILIC®-Fusion UHPLC Column, SS – Stainless steel column hardware	価格
110.052.0110	iHILIC®-Fusion HILIC Column, SS, 50x2.1 mm, 1.8 μm, 100Å	¥120,000
110.102.0110	iHILIC®-Fusion HILIC Column, SS, 100x2.1 mm, 1.8 μm, 100Å	¥130,000
110.152.0110	iHILIC®-Fusion HILIC Column, SS, 150x2.1 mm, 1.8 μm, 100Å	¥143,000
110.053.0110	iHILIC®-Fusion HILIC Column, SS, 50x3.0 mm, 1.8 μm, 100Å	¥128,000
110.103.0110	iHILIC®-Fusion HILIC Column, SS, 100x3.0 mm, 1.8 μm, 100Å	¥135,000
110.153.0110	iHILIC®-Fusion HILIC Column, SS, 150x3.0 mm, 1.8 μm, 100Å	¥151,000

P/N	iHILIC®-Fusion HPLC Column, PEEK – Engineering plastic column hardware	価格
110.022.0310	iHILIC®-Fusion HILIC Column, PEEK, 20x2.1 mm, 3.5μm, 100Å	¥90,000
110.052.0310	iHILIC®-Fusion HILIC Column, PEEK, 50x2.1 mm, 3.5μm, 100Å	¥102,000
110.102.0310	iHILIC®-Fusion HILIC Column, PEEK, 100x2.1 mm, 3.5μm, 100Å	¥110,000
110.152.0310	iHILIC®-Fusion HILIC Column, PEEK, 150x2.1 mm, 3.5μm, 100Å	¥128,000
110.054.0310	iHILIC®-Fusion HILIC Column, PEEK, 50x4.6 mm, 3.5μm, 100Å	¥104,000
110.104.0310	iHILIC®-Fusion HILIC Column, PEEK, 100x4.6 mm, 3.5μm, 100Å	¥123,000
110.154.0310	iHILIC®-Fusion HILIC Column, PEEK, 150x4.6 mm, 3.5μm, 100Å	¥143,000
110.022.0510	iHILIC®-Fusion HILIC Column, PEEK, 20x2.1 mm, 5μm, 100Å	¥89,000
110.052.0510	iHILIC®-Fusion HILIC Column, PEEK, 50x2.1 mm, 5μm, 100Å	¥97,000
110.102.0510	iHILIC®-Fusion HILIC Column, PEEK, 100x2.1 mm, 5μm, 100Å	¥104,000
110.152.0510	iHILIC®-Fusion HILIC Column, PEEK, 150x2.1 mm, 5μm, 100Å	¥120,000
110.252.0510	iHILIC®-Fusion HILIC Column, PEEK, 250x2.1 mm, 5μm, 100Å	¥147,000
110.054.0510	iHILIC®-Fusion HILIC Column, PEEK, 50x4.6 mm, 5μm, 100Å	¥99,000
110.104.0510	iHILIC®-Fusion HILIC Column, PEEK, 100x4.6 mm, 5μm, 100Å	¥117,000
110.154.0510	iHILIC®-Fusion HILIC Column, PEEK, 150x4.6 mm, 5μm, 100Å	¥135,000
110.254.0510	iHILIC®-Fusion HILIC Column, PEEK, 250x4.6 mm, 5μm, 100Å	¥169,000
111.122.0510	iHILIC®-Fusion Guard Column, PEEK, 20x2.1mm, 5μm, 100Å, 1 pk	¥49,000
111.322.0510	iHILIC®-Fusion Guard Column, PEEK, 20x2.1mm, 5μm, 100Å, 3 pk	¥115,000

P/N	iHILIC®-Fusion HPLC Column, SS – Stainless steel column hardware (SFC)	価格
114.053.0310	iHILIC®-Fusion HILIC Column, SS, 50x3.0 mm, 3.5μm, 100Å	¥120,000
114.103.0310	iHILIC®-Fusion HILIC Column, SS, 100x3.0 mm, 3.5μm, 100Å	¥130,000
114.153.0310	iHILIC®-Fusion HILIC Column, SS, 150x3.0 mm, 3.5μm, 100Å	¥148,000
114.253.0310	iHILIC®-Fusion HILIC Column, SS, 250x3.0 mm, 3.5μm, 100Å	¥169,000
114.053.0510	iHILIC®-Fusion HILIC Column, SS, 50x3.0 mm, 5μm, 100Å	¥120,000
114.103.0510	iHILIC®-Fusion HILIC Column, SS, 100x3.0 mm, 5μm, 100Å	¥130,000
114.153.0510	iHILIC®-Fusion HILIC Column, SS, 150x3.0 mm, 5μm, 100Å	¥143,000
114.253.0510	iHILIC®-Fusion HILIC Column, SS, 250x3.0 mm, 5μm, 100Å	¥164,000

P/N	iHILIC®-Fusion(P) HPLC Column, PEEK – Engineering plastic column hardware	価格
130.052.0520	iHILIC®-Fusion(P) HILIC Column, PEEK, 50x2.1 mm, 5μm, 200Å	¥123,000
130.102.0520	iHILIC®-Fusion(P) HILIC Column, PEEK, 100x2.1 mm, 5μm, 200Å	¥135,000
130.152.0520	iHILIC®-Fusion(P) HILIC Column, PEEK, 150x2.1 mm, 5μm, 200Å	¥148,000
130.054.0520	iHILIC®-Fusion(P) HILIC Column, PEEK, 50x4.6 mm, 5μm, 200Å	¥133,000
130.104.0520	iHILIC®-Fusion(P) HILIC Column, PEEK, 150x4.6 mm, 5μm, 200Å	¥151,000
130.154.0520	iHILIC®-Fusion(P) HILIC Column, PEEK, 150x4.6 mm, 5μm, 200Å	¥170,000
131.122.0520	iHILIC®-Fusion(P) HILIC Column, PEEK, 20x2.1 mm, 5μm, 200Å, 1 pk	¥58,000
131.322.0520	iHILIC®-Fusion(P) HILIC Column, PEEK, 20x2.1 mm, 5μm, 200Å, 3 pk	¥141,000

P/N	iHILIC®-Fusion HPLC Column, SS – Stainless steel column hardware	価格
134.053.0510	iHILIC®-Fusion(P) HILIC Column, SS, 50x3.0 mm, 5μm, 200Å	¥130,000
134.103.0510	iHILIC®-Fusion(P) HILIC Column, SS, 100x3.0 mm, 5μm, 200Å	¥143,000
134.153.0510	iHILIC®-Fusion(P) HILIC Column, SS, 150x3.0 mm, 5μm, 200Å	¥156,000

P/N	iHILIC®-Fusion(+) UHPLC Column, SS – Stainless steel column hardware	価格
100.052.0110	iHILIC®-Fusion(+) HILIC Column, SS, 50x2.1 mm, 1.8 μm, 100Å	¥120,000
100.102.0110	iHILIC®-Fusion(+) HILIC Column, SS, 100x2.1 mm, 1.8 μm, 100Å	¥130,000
100.152.0110	iHILIC®-Fusion(+) HILIC Column, SS, 150x2.1 mm, 1.8 μm, 100Å	¥143,000
100.053.0110	iHILIC®-Fusion(+) HILIC Column, SS, 50x3.0 mm, 1.8 μm, 100Å	¥128,000
100.103.0110	iHILIC®-Fusion(+) HILIC Column, SS, 100x3.0 mm, 1.8 μm, 100Å	¥135,000
100.153.0110	iHILIC®-Fusion(+) HILIC Column, SS, 150x3.0 mm, 1.8 μm, 100Å	¥151,000

P/N	iHILIC®-Fusion(+) HPLC Column, PEEK – Engineering plastic column hardware	価格
100.022.0310	iHILIC®-Fusion(+) HILIC Column, PEEK, 20x2.1 mm, 3.5μm, 100Å	¥90,000
100.052.0310	iHILIC®-Fusion(+) HILIC Column, PEEK, 50x2.1 mm, 3.5μm, 100Å	¥102,000
100.102.0310	iHILIC®-Fusion(+) HILIC Column, PEEK, 100x2.1 mm, 3.5μm, 100Å	¥110,000
100.152.0310	iHILIC®-Fusion(+) HILIC Column, PEEK, 150x2.1 mm, 3.5μm, 100Å	¥128,000
100.054.0310	iHILIC®-Fusion(+) HILIC Column, PEEK, 50x4.6 mm, 3.5μm, 100Å	¥104,000
100.104.0310	iHILIC®-Fusion(+) HILIC Column, PEEK, 100x4.6 mm, 3.5μm, 100Å	¥123,000
100.154.0310	iHILIC®-Fusion(+) HILIC Column, PEEK, 150x4.6 mm, 3.5μm, 100Å	¥143,000
100.022.0510	iHILIC®-Fusion(+) HILIC Column, PEEK, 20x2.1 mm, 5μm, 100Å	¥89,000
100.052.0510	iHILIC®-Fusion(+) HILIC Column, PEEK, 50x2.1 mm, 5μm, 100Å	¥97,000
100.102.0510	iHILIC®-Fusion(+) HILIC Column, PEEK, 100x2.1 mm, 5μm, 100Å	¥104,000
100.152.0510	iHILIC®-Fusion(+) HILIC Column, PEEK, 150x2.1 mm, 5μm, 100Å	¥120,000
100.252.0510	iHILIC®-Fusion(+) HILIC Column, PEEK, 250x2.1 mm, 5μm, 100Å	¥147,000
100.054.0510	iHILIC®-Fusion(+) HILIC Column, PEEK, 50x4.6 mm, 5μm, 100Å	¥99,000
100.104.0510	iHILIC®-Fusion(+) HILIC Column, PEEK, 100x4.6 mm, 5μm, 100Å	¥117,000
100.154.0510	iHILIC®-Fusion(+) HILIC Column, PEEK, 150x4.6 mm, 5μm, 100Å	¥135,000
100.254.0510	iHILIC®-Fusion(+) HILIC Column, PEEK, 250x4.6 mm, 5μm, 100Å	¥169,000
101.122.0510	iHILIC®-Fusion(+) Guard Column, PEEK, 20x2.1mm, 5μm, 100Å, 1 pk	¥49,000
101.322.0510	iHILIC®-Fusion(+) Guard Column, PEEK, 20x2.1mm, 5μm, 100Å, 3 pk	¥115,000

P/N	iHILIC®-Fusion HPLC Column, SS – Stainless steel column hardware (SFC)	価格
104.053.0310	iHILIC®-Fusion(+) HILIC Column, SS, 50x3.0 mm, 3.5μm, 100Å	¥120,000
104.103.0310	iHILIC®-Fusion(+) HILIC Column, SS, 100x3.0 mm, 3.5μm, 100Å	¥130,000
104.153.0310	iHILIC®-Fusion(+) HILIC Column, SS, 150x3.0 mm, 3.5μm, 100Å	¥148,000
104.253.0310	iHILIC®-Fusion(+) HILIC Column, SS, 250x3.0 mm, 3.5μm, 100Å	¥169,000
104.053.0510	iHILIC®-Fusion(+) HILIC Column, SS, 50x3.0 mm, 5μm, 100Å	¥120,000
104.103.0510	iHILIC®-Fusion(+) HILIC Column, SS, 100x3.0 mm, 5μm, 100Å	¥130,000
104.153.0510	iHILIC®-Fusion(+) HILIC Column, SS, 150x3.0 mm, 5μm, 100Å	¥143,000
104.253.0510	iHILIC®-Fusion(+) HILIC Column, SS, 250x3.0 mm, 5μm, 100Å	¥164,000

P/N	iSPE®-HILIC SPE Cartridge for HILIC	Units/Box	価格
200-001-0025	iSPE-HILIC SPE Cartridge, 1 mL, 25 mg, 50 μm particle	100	¥66,000
200-001-0050	iSPE-HILIC SPE Cartridge, 1 mL, 50 mg, 50 μm particle	100	¥70,000
200-001-0100	iSPE-HILIC SPE Cartridge, 1 mL, 100 mg, 50 μm particle	100	¥84,000
200-003-0100	iSPE-HILIC SPE Cartridge, 3 mL, 100 mg, 50 μm particle	50	¥52,000
200-003-0200	iSPE-HILIC SPE Cartridge, 3 mL, 200 mg, 50 μm particle	50	¥61,000
200-003-0500	iSPE-HILIC SPE Cartridge, 3 mL, 500 mg, 50 μm particle	50	¥99,000
200-006-0500	iSPE-HILIC SPE Cartridge, 6 mL, 500 mg, 50 μm particle	25	¥63,000
200-006-1000	iSPE-HILIC SPE Cartridge, 6 mL, 1 g, 50 μm particle	25	¥99,000

※上記価格は2019年4月1日から適用されます。

※上記価格には消費税は含まれておりません。

輸入元

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