

液晶材料

各種液晶性化合物および液晶性化合物のビルディングブロックとなる各種メソゲン基を合成します。今までに合成経験のある化合物をリストに示します。

どのような構造の化合物でも合成対応します。合成法不明の化合物でも弊社で合成ルートを確認します。少量多品種合成に対応します。お気軽にお問い合わせください。

液晶性化合物の一例として合成した [4-(4-Ethoxyphenyl)phenyl] 4-fluorobenzoate (ID:1768) の液晶性評価結果を Fig. に示します。エナンチオトロピックなネマティック相 (N) とスメクティック A 相 (SmA)、モノトロピックな高次のスメクティック相 (SmX, unidentified) が観察されました。

DSC 測定 : Diamond DSC (Perkin Elmer)

偏光顕微鏡観察 : ECLIPSE E600 (Nikon)、FP-82 Hot stage, FP-90 Central processor (Mettler Toledo)

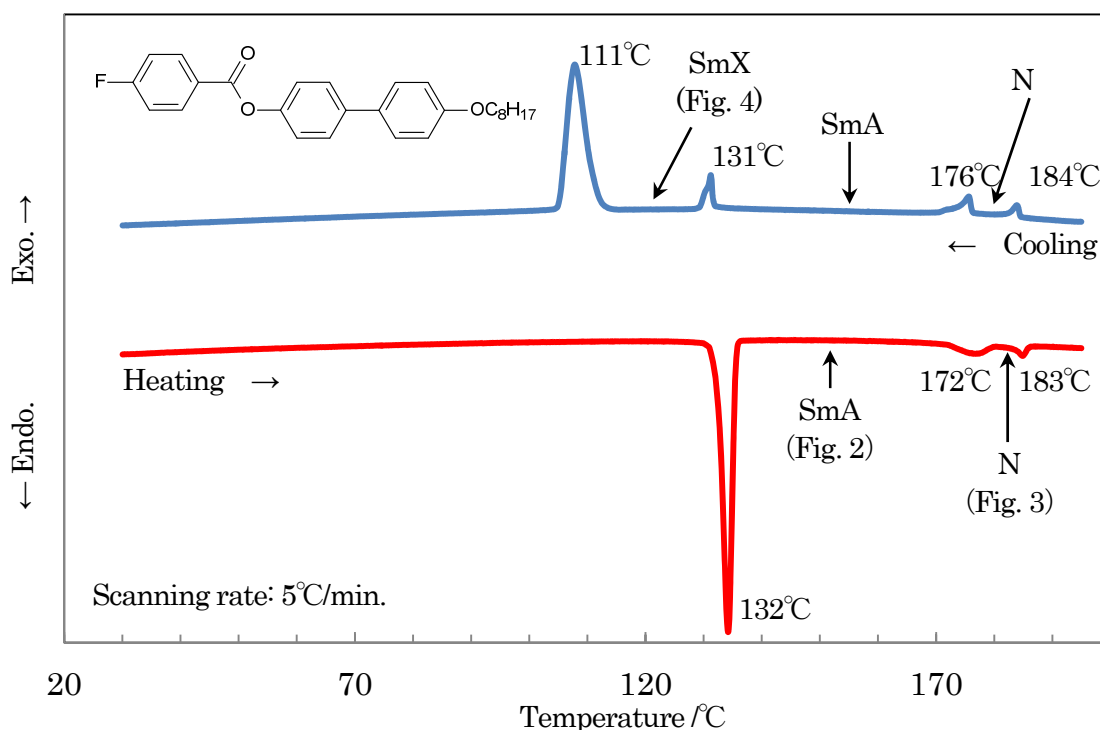


Fig.1 DSC curve of [4-(4-Ethoxyphenyl)phenyl] 4-fluorobenzoate (ID:1768)

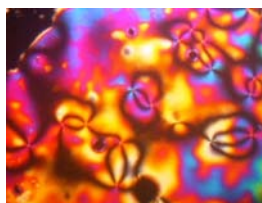


Fig.2 Schlieren textures of N phase

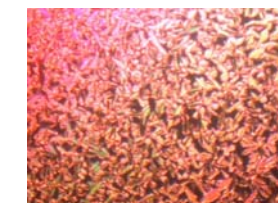
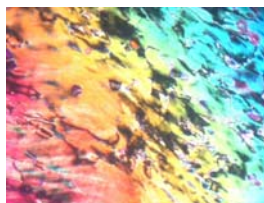


Fig.3 Fan-like textures of SmA phase

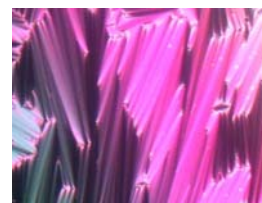
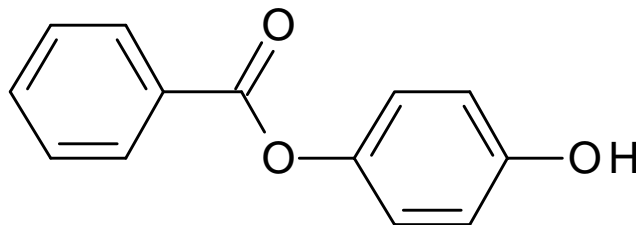


Fig.4 Textures of SmX phase.

Compound List

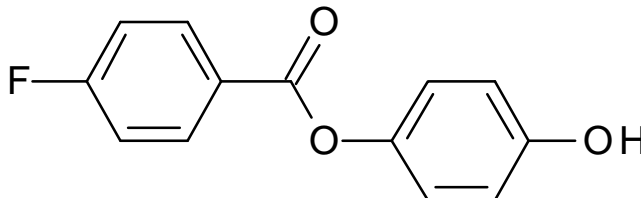
Compound No. 1703 Cas_No 2444-19-1
 MF C13H10O3 MW 214.2

(4-Hydroxyphenyl) benzoate



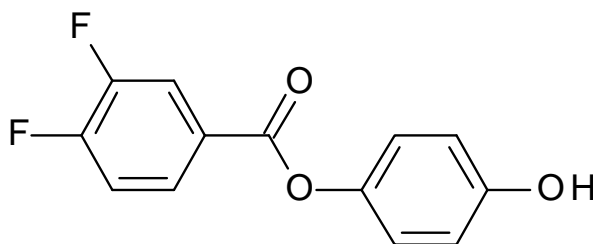
Compound No. 1705 Cas_No 89100-59-4
 MF C13H9FO3 MW 232.2

(4-Hydroxyphenyl) 4-fluorobenzoate



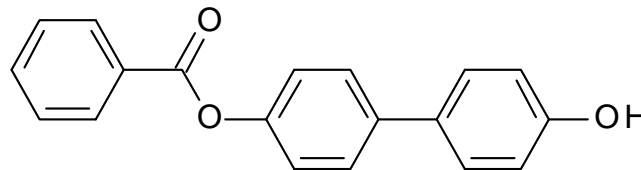
Compound No. 1707 Cas_No --
 MF C13H8F2O3 MW 250.2

(4-Hydroxyphenyl) 3,4-difluorobenzoate



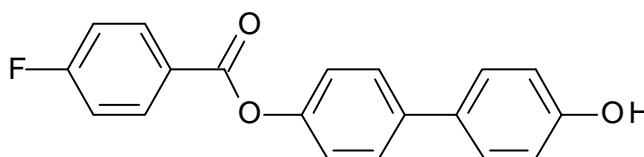
Compound No. 1709 Cas_No --
 MF C19H14O3 MW 290.3

[4-(4-Hydroxybiphenyl)] benzoate



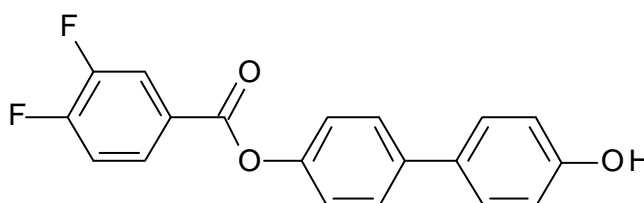
Compound No. 1710 Cas_No --
 MF C19H13FO3 MW 308.3

[4-(4-Hydroxybiphenyl)] 4-fluorobenzoate



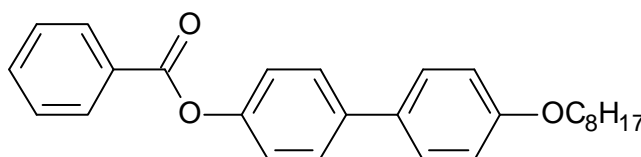
Compound No. 1766 Cas_No --
 MF C19H12F2O3 MW 326.3

[4-(4-Hydroxybiphenyl)] 3,4-difluorobenzoate

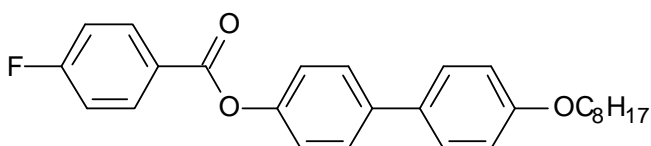
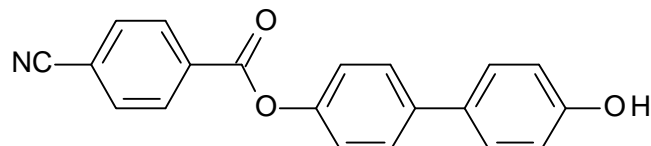
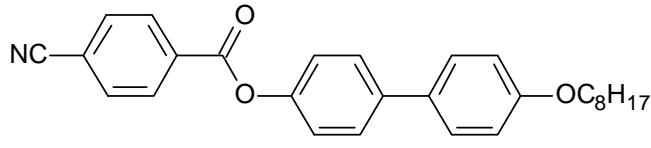
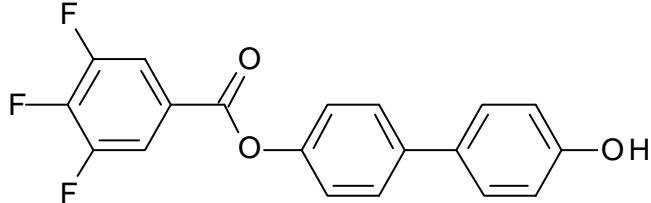
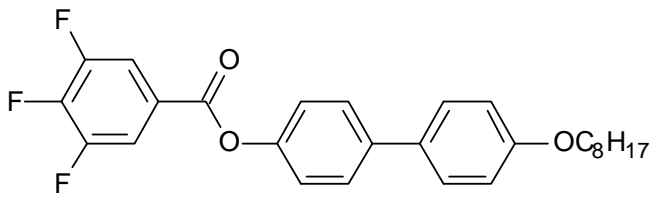
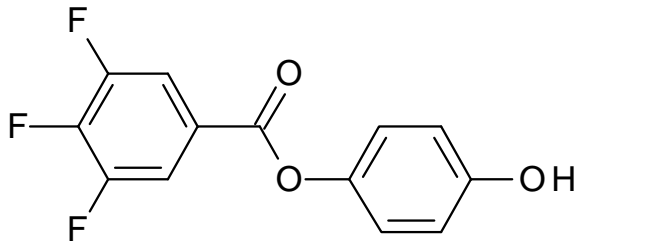
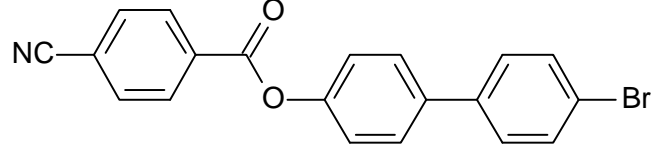


Compound No. 1767 Cas_No 124556-23-6
 MF C27H30O3 MW 402.5

[4-(4-octoxybiphenyl)] benzoate

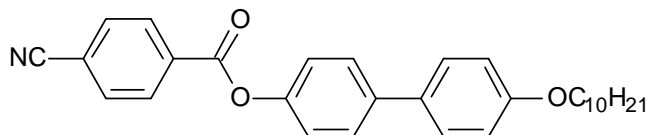


Compound List

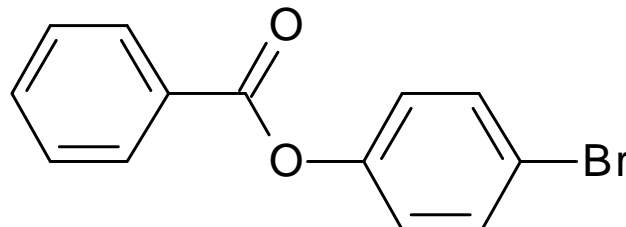
| | | | | |
|---|-------------|--------|-------------|--|
| Compound No. | 1768 | Cas_No | 131367-66-3 |  |
| MF | C27H29FO3 | MW | 420.5 | |
| [4-(4-octoxybiphenyl)] 4-fluorobenzoate | | | | |
| Compound No. | 1779 | Cas_No | --- |  |
| MF | C20H13NO3 | MW | 315.3 | |
| [4-(4-Hydroxybiphenyl)] 4-cyanobenzoate | | | | |
| Compound No. | 1784 | Cas_No | 95754-78-2 |  |
| MF | C28H29NO3 | MW | 427.5 | |
| [4-(4-octoxybiphenyl)] 4-cyanobenzoate | | | | |
| Compound No. | 2418 | Cas_No | --- |  |
| MF | C19H11F3O3 | MW | 344.3 | |
| [4-(4-hydroxybiphenyl)] 3,4,5-trifluorobenzoate | | | | |
| Compound No. | 2419 | Cas_No | 221879-17-0 |  |
| MF | C27H27F3O3 | MW | 456.5 | |
| [4-(4-octoxybiphenyl)] 3,4,5-trifluorobenzoate | | | | |
| Compound No. | 2420 | Cas_No | --- |  |
| MF | C13H7F3O3 | MW | 268.2 | |
| (4-hydroxyphenyl) 3,4,5-trifluorobenzoate | | | | |
| Compound No. | 2430 | Cas_No | --- |  |
| MF | C20H12BrNO2 | MW | 378.2 | |
| [4-(4-bromobiphenyl)] 4-cyanobenzoate | | | | |

Compound List

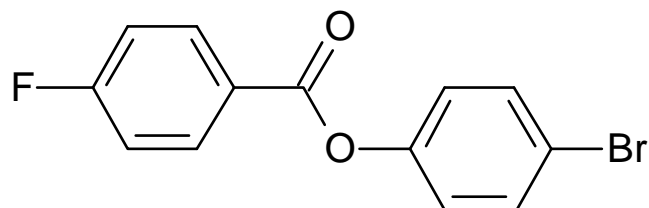
Compound No. 2431 Cas_No 95754-80-6
 MF C30H33NO3 MW 455.6
 [4-(4-decoxybiphenyl)] 4-cyanobenzoate



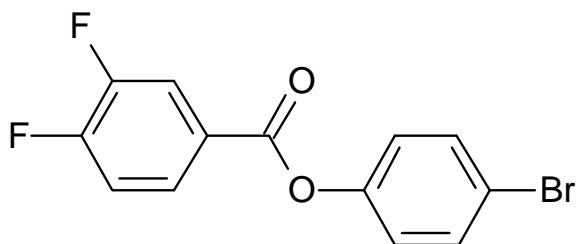
Compound No. 2450 Cas_No 1523-17-7
 MF C13H9BrO2 MW 277.11
 (4-bromophenyl) benzoate



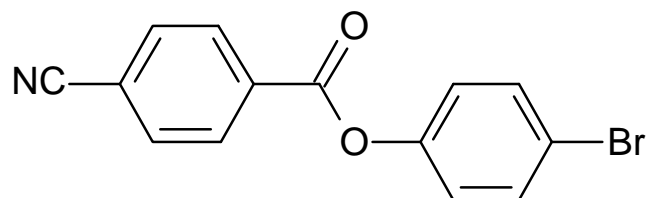
Compound No. 2451 Cas_No 656-21-3
 MF C13H8BrFO2 MW 295.1
 (4-bromophenyl) 4-fluorobenzoate



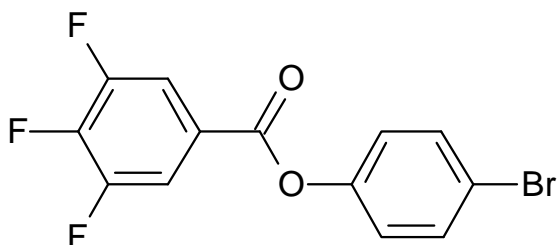
Compound No. 2452 Cas_No --
 MF C13H7BrF2O2 MW 313.09
 (4-bromophenyl) 3,4-difluorobenzoate



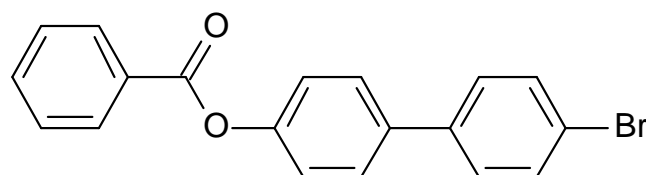
Compound No. 2453 Cas_No 53327-10-9
 MF C14H8BrNO2 MW 302.12
 (4-bromophenyl) 4-cyanobenzoate



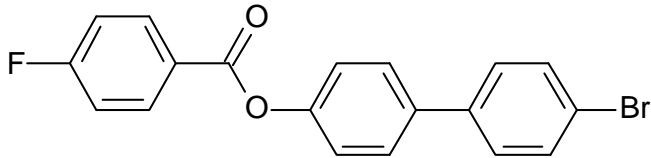
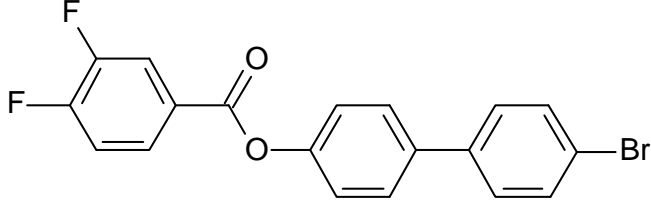
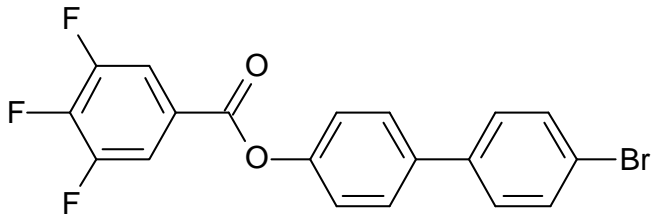
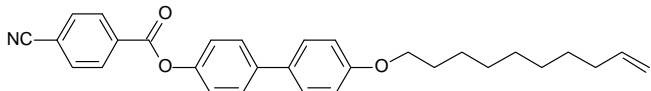
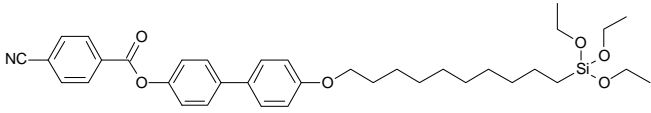
Compound No. 2454 Cas_No --
 MF C13H6BrF3O2 MW 331.08
 (4-bromophenyl) 3,4,5-trifluorobenzoate



Compound No. 2455 Cas_No 94375-26-5
 MF C19H13BrO2 MW 353.21
 [4-(4-bromobiphenyl)] benzoate



Compound List

| | | | |
|--|--------------|--------|--------|
| Compound No. | 2456 | Cas_No | |
| MF | C19H12BrFO2 | MW | 371.2 |
| [4-(4-bromobiphenyl)] 4-fluorobenzoate | | | |
|  | | | |
| Compound No. | 2457 | Cas_No | -- |
| MF | C19H11BrF2O2 | MW | 389.19 |
| [4-(4-bromobiphenyl)] 3,4-difluorobenzoate | | | |
|  | | | |
| Compound No. | 2458 | Cas_No | -- |
| MF | C19H10BrF3O2 | MW | 407.18 |
| [4-(4-bromobiphenyl)] 3,4,5-trifluorobenzoate | | | |
|  | | | |
| Compound No. | 2468 | Cas_No | -- |
| MF | C30H31NO3 | MW | 453.57 |
| [4-(4-dec-9-enoxybiphenyl)] 4-cyanobenzoate | | | |
|  | | | |
| Compound No. | 2473 | Cas_No | -- |
| MF | C36H47NO6Si | MW | 617.85 |
| [4-(10-triethoxysilyldecoxy)biphenyl] 4-cyanobenzoate | | | |
|  | | | |