Supporting Information

FeCl₃ catalysed multicomponent divergent synthesis of indeno-fused heterocycles library

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$^1$H NMR of compound 4a
$^{13}$C NMR of compound 4a
$^1$H NMR of compound 4b
$^{13}$C NMR of compound 4b
$^1$H NMR of compound 4c
$^{13}$C NMR of compound 4c
$^1$H NMR of compound 4d
$^{13}$C NMR of compound 4d
$^1$H NMR of compound 4e
DEPTQ-135 of compound 4e
$^1$H NMR of compound 4f
DEPTQ-135 of compound 4f
$^1$H NMR of compound 4g
$^{13}$C NMR of compound 4g
$^1$H NMR of compound 4h
$^{13}$C NMR of compound 4h
$^1$H NMR of compound 4i
$^{13}$C NMR of compound 4i
$^1$H NMR of compound 4j
$^{13}$C NMR of compound 4j
$^1$H NMR of compound 4k
$^{13}$C NMR of compound 4k
$^1$H NMR of compound 4l
$^{13}$C NMR of compound 41
$^1$H NMR of the crude product mixture 4m
$^{13}$C NMR of the crude compound 4m
$^1$H NMR of the crude product mixture $4n$
$^{13}$C NMR of the crude compound 4n
$^1$H NMR of compound 4o
$^{13}$C NMR of compound 40
$^1$H NMR of compound 4p
$^{13}$C NMR of compound 4p
$^1$H NMR of compound 4q
$^{13}$C NMR of compound 4q
"$^1$H NMR of compound 4r"
$^{13}$C NMR of compound 4r
\(^1\)H NMR of compound 4s
$^{13}$C NMR of compound 4s
\(^1\text{H NMR of compound 4t}\)
$^{13}$C NMR of compound 4t
$^1$H NMR of compound 4u
$^{13}$C NMR of compound 4u
$^1$H NMR of compound 4v
$^{13}$C NMR of compound 4v


$^1$H NMR of compound 4W
$^{13}$C NMR of compound 4w
$^1$H NMR of compound 4x
$^{13}$C NMR of compound 4x
\(^1\)H NMR of compound 10a
$^{13}$C NMR of compound 10a
$^1$H NMR of compound 10b
$^{13}$C NMR of compound 10b
$^1$H NMR of compound 10c
$^{13}$C NMR of compound 10c
$^1$H NMR of compound 10d
$^{13}$C NMR of compound 10d
$^1$H NMR of compound 10e
$^{13}$C NMR of compound 10e
$^1$H NMR of compound 10f
$^{13}$C NMR of compound 10f
$^1$H NMR of compound 5
$^{13}$C NMR of compound 5
\[ ^1\text{H NMR of compound 6} \]

We are not able to take the \(^{13}\text{C NMR of the compound (6)}\) due to poor solubility in the NMR solvent.
Figure 6: ORTEP plot of a single crystal of the 5,6,7,12-tetrahydro-6-methyl-7,12-dioxo-5-phenylindenol[1,2,3,2-bcd]pyridine-6-carboxylate (5) (CCDC 905877) showing the crystallographic numbering.