Supporting Information

Efficient Microwave-Assisted Suzuki-Miyaura Cross-Coupling Reaction of 3-Bromo Pyrazolo[1,5-a]pyrimidin-5(4H)-one: Towards a New Access to 3,5-diarylated 7-(Trifluoromethyl)pyrazolo[1,5-a]pyrimidines derivatives.

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3-Bromo-7-(trifluoromethyl)pyrazolo[1,5-α]pyrimidin-5(4H)-one (4a)
3-Iodo-7-(trifluoromethyl)pyrazolo[1,5-a]pyrimidin-5(4H)-one (4b)

DMSO-\textit{d6}, 75 MHz

DMSO-\textit{d6}, 300 MHz
3-(4-Methoxyphenyl)-7-(trifluoromethyl)pyrazolo[1,5-a]pyrimidin-5(4H)-one (5a).
3-Phenyl-7-(trifluoromethyl)pyrazolo[1,5-α]pyrimidin-5(4H)-one (5b).
3-[(1,1′-Biphenyl)-3-yl]-7-(trifluoromethyl)pyrazolo[1,5-a]pyrimidin-5(4H)-one (5c).
3-(Naphthalen-2-yl)-7-(trifluoromethyl)pyrazolo[1,5-a]pyrimidin-5(4H)-one (5d).
3-\((p\text{-}\text{Tolyl})\)-7-(trifluoromethyl)pyrazolo[1,5-\(a\)]pyrimidin-5(4\(H\))\-one (5e).
3-(3-Methoxyphenyl)-7-(trifluoromethyl)pyrazolo[1,5-a]pyrimidin-5(4H)-one (5f).
3-(2-Methoxyphenyl)-7-(trifluoromethyl)pyrazolo[1,5-a]pyrimidin-5(4H)-one (5g).
3-(2,3-Dihydrobenzo[b][1,4]dioxin-6-yl)-7-(trifluoromethyl)pyrazolo[1,5-a]pyrimidin-5(4H)-one (5h).
3-(4-Acetylphenyl)-7-(trifluoromethyl)pyrazolo[1,5-a]pyrimidin-5(4H)-one (5i).
Ethyl 4-(5-oxo-7-(trifluoromethyl)-4,5-dihydropyrazolo[1,5-a]pyrimidin-3-yl)benzoate (5j).
3-(4-Fluorophenyl)-7-(trifluoromethyl)pyrazolo[1,5-α]pyrimidin-5(4H)-one (5k).
3-(Thiophen-2-yl)-7-(trifluoromethyl)pyrazolo[1,5-a]pyrimidin-5(4H)-one (SI).
3-(Thiophen-3-yl)-7-(trifluoromethyl)pyrazolo[1,5-a]pyrimidin-5(4H)-one (5m).
3-(Furan-2-yl)-7-(trifluoromethyl)pyrazolo[1,5-a]pyrimidin-5(4H)-one (5n).
Acetone-d₆, 282 MHz

DMF-d₇, 75 MHz
3-(Pyridin-3-yl)-7-(trifluoromethyl)pyrazolo[1,5-a]pyrimidin-5(4H)-one (5o).
3-[4-(Hydroxymethyl)phenyl]-7-(trifluoromethyl)pyrazolo[1,5-\textit{a}]pyrimidin-5(4\textit{H})-one (5p)
(E)-3-Styril-7-(trifluoromethyl)pyrazolo[1,5-a]pyrimidin-5(4H)-one (5q).
8-Bromo-4-(trifluoromethyl)pyrimido[1,2-b]indol-2(1H)-one (7a).
9-Bromo-4-(trifluoromethyl)pyrimido[1,2-b]indazol-2(1H)-one (7b).
10-Bromo-4-(trifluoromethyl)pyrimido[1,2-b]indazol-2(1H)-one (7c).
9-Phenyl-4-(trifluoromethyl)pyrimido[1,2-b]indazol-2(1H)-one (8a).
9-(4-Methoxyphenyl)-4-(trifluoromethyl)pyrimido[1,2-b]indazol-2(1H)-one (8b).
9-(4-Acetylphenyl)-4-(trifluoromethyl)pyrimido[1,2-b]indazol-2(1H)-one (8c).
9-(Furan-2-yl)-4-(trifluoromethyl)pyrimido[1,2-b]indazol-2(1H)-one (8d).
8-Phenyl-4-(trifluoromethyl)pyrimido[1,2-b]indazol-2(1H)-one (9a).
8-[4-(Hydroxymethyl)phenyl]-4-(trifluoromethyl)pyrimido[1,2-b]indazol-2(1H)-one (9b).
(E)-8-Styryl-4-(trifluoromethyl)pyrimido[1,2-b]indazol-2(1H)-one (9c).
8-(Furan-2-yl)-4-(trifluoromethyl)pyrimido[1,2-b]indazol-2(1H)-one (9d).
10-(4-Methoxyphenyl)-4-(trifluoromethyl)pyrimido[1,2-b]indazol-2(1H)-one (10a).
10-(Pyridin-3-yl)-4-(trifluoromethyl)pyrimido[1,2-b]indazol-2(1H)-one (10b).
5-(4-Methoxyphenyl)-3-phenyl-7-(trifluoromethyl)pyrazolo[1,5-a]pyrimidine (11a).
5-(2-Methoxyphenyl)-3-phenyl-7-(trifluoromethyl)pyrazolo[1,5-a]pyrimidine (11b).
11b

CDDP, 282 MHz

11b

CDDP, 75 MHz
3-Phenyl-5-(thiophen-2-yl)-7-(trifluoromethyl)pyrazolo[1,5-a]pyrimidine (11c).
5-(4-Fluorophenyl)-3-(4-methoxyphenyl)-7-(trifluoromethyl)pyrazolo[1,5-α]pyrimidine (11d).
5-(4-Methoxyphenyl)-3-(p-tolyl)-7-(trifluoromethyl)pyrazolo[1,5-a]pyrimidine (11e).
Ethyl 4-(5-(4-methoxyphenyl)-7-(trifluoromethyl)pyrazolo[1,5-a]pyrimidin-3-yl)benzoate (11f).
5-(4-Methoxyphenyl)-3-(thiophen-2-yl)-7-(trifluoromethyl)pyrazolo[1,5-a]pyrimidine (11g).
5-(4-Bromophenyl)-3-phenyl-7-(trifluoromethyl)pyrazolo[1,5-a]pyrimidine (11h).
3,5-Bis(4-methoxyphenyl)-7-(trifluoromethyl)purazolo[1,5-a]pyrimidine (12).
3-Phenyl-5-(phenylethynyl)-7-(trifluoromethyl)pyrazolo[1,5-a]pyrimidine (13a).
5-[(4-Methoxyphenyl)ethynyl]-3-phenyl-7-(trifluoromethyl)pyrazolo[1,5-a]pyrimidine (13b).
5-[(4-Chlorophenyl)ethynyl]-3-phenyl-7-(trifluoromethyl)pyrazolo[1,5-a]pyrimidine (13c).
