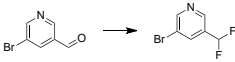


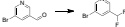
REACTANTS TABLE:

| amount  | condition | equality | formula                        | id | moles | mw     | name   |
|---------|-----------|----------|--------------------------------|----|-------|--------|--|
| 186.008 | solid     | 1.0      | C<sub>6</sub>H<sub>4</sub>BrNO | 6  | 1.0   | 186.01 | 2-[4-[3- (2- chloro- 5- methyl- pyrimidi n-4- yl)pheny l]buto xy] pyridin- 4-amin e2-[4-[3- (2- chloro- 5- methyl- pyrimidi n-4- yl)pheny l]buto xy] pyridin- 4-amin |

REAGENTS TABLE:

| svg  | amount  | condition | equality | formula                                  | id | moles | mw     | name           |
|--|---------|-----------|----------|--|----|-------|--------|----------------|
|  | 150.177 | solid     | 1.0      | C<sub>9</sub>H<sub>10</sub>O<sub>2</sub> | 4  | 1.0   | 150.18 | benzyl acetate |

PRODUCTS TABLE:

| svg   | amount  | condition | equality | formula                                    | id | moles | mw     | name                               |
|---|---------|-----------|----------|--|----|-------|--------|------------------------------------|
|  | 208.006 | pure      | 1.0      | C<sub>6</sub>H<sub>4</sub>BrF<sub>2</sub>N | 6  | 1.0   | 208.01 | 3-bromo-5-(difluoromethyl)pyridine |

PROCEDURE:

(5-bromonicotinaldehyde; mw=186.01g/mol; amount=186.008g) (benzyl acetate; mw=150.18g/mol; amount=150.177g) (3-bromo-5-(difluoromethyl)pyridine; mw=208.01g/mol; amount=208.006g; crude) 5.19.2.4.3.(iii) N-Substituted amidrazones by N-alkylation of simpler amidrazones The alkylation of amidrazones has been studied by Smith and co-workers <1971JOC1155, 1973JOC1344, 1977JOC1862>. Depending upon the substitution pattern, alkylation can occur on any of the three nitrogen atoms, but in most cases alkylation occurs at N2 or N3 so that an “amidinium like” delocalized cation is formed. Scheme 31 gives an example of N2 alkylation via a delocalized cation, whereas in Scheme 32 amidrazones 108 and 109 are also alkylated to give a delocalized cation but via alkylation at the N3 atom. Further examples are given in chapter 5.19.2.4.3 of <1995COFGT(5)741>, and there have been no significant advances since the publication of that chapter.