

## Supplementary Material

## New Schiff bases from 2,5-bis-(butylsulfanyl)-2,3-dihydro-4H-pyran-2-carbaldehyde

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## Experimental Section

**General.** The  $^1\text{H}$ ,  $^{13}\text{C}$  and  $^{15}\text{N}$  NMR spectra were recorded in  $\text{CDCl}_3$  solutions at room temperature on Bruker DPX-400 and AV-400 spectrometers (400.13, 100.61 and 40.56 MHz, respectively).  $^1\text{H}$ ,  $^{13}\text{C}$  and  $^{15}\text{N}$  Chemical shifts ( $\delta$  in ppm) were measured with accuracy of 0.01, 0.02 and 0.1 ppm, respectively, and referred to TMS ( $^1\text{H}$ ,  $^{13}\text{C}$ ) and nitromethane ( $^{15}\text{N}$ ). Chromato-mass spectrometry analysis was performed on a Shimadzu GCMS-QP5050A mass spectrometer (EI ionization, 70 eV). The IR spectra of the compounds were recorded on a Varian 3100 FT-IR spectrometer with the sample in thin film. Elemental analysis was performed on a Thermo Finnigan Flash series 1112 Elemental analyzer.

### *General synthesis of compounds 3a-c, 3e-g:*

Compounds **3a-c, e**: To the solution of **1** (1 mmol, 0.288 g) of compound (**1**) in MeOH or THF was added 1 mmol of amine (**2a-c**) or amino acid **2e** and the mixture was stirred for 1-6 h at room temperature or reflux. The reaction mixture was dried with  $\text{MgSO}_4$ , the precipitate was filtered off and the solvent was removed in vacuo. The desired imine was obtained as an oil or powder.

Compounds **3f, g**: To the solution of **1** (1 mmol, 0.288 g) of compound (**1**) in MeOH was added 1 mmol of amino acid methyl ester hydrochloride (**2f, g**) and NaOH (1 mmol) and the mixture was stirred for 4 h at room temperature. The reaction mixture was dried with  $\text{MgSO}_4$ , the precipitate was filtered off and the solvent was removed in vacuum. The desired imine was obtained as an oil.

























