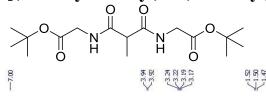
Stereoselective synthesis of short benzyl malonyl peptides

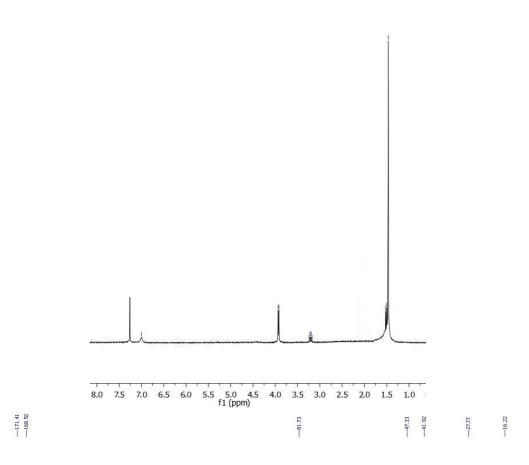
Emanuele Aresu, Stefania Fioravanti,* Simona Gasbarri, Lucio Pellacani, and Fabio Sciubba

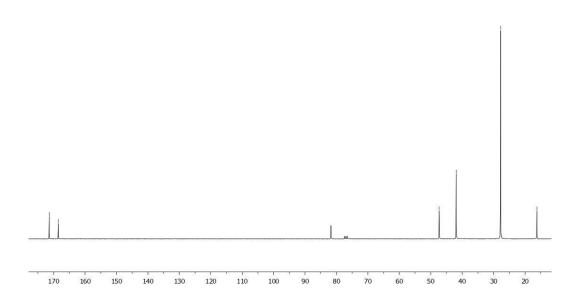
Dipartimento di Chimica, Università di Roma La Sapienza, P.le Aldo Moro 5, I-00185 Roma, Italy

 $E\hbox{-}mail: stefania. fior avanti@uniroma1. it$

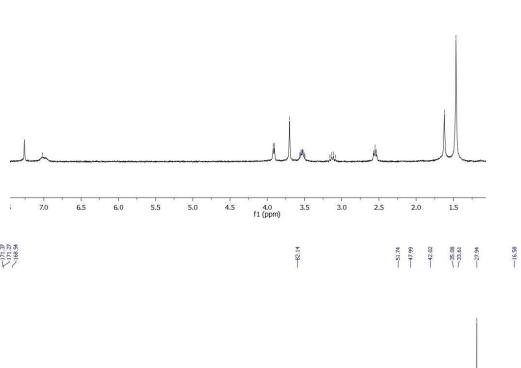
$Di\textit{-}tert\text{-}butyl~2,2'\text{-}[(2\text{-}methylmalonyl)bis(azanediyl)]} diacetate~(2a)$

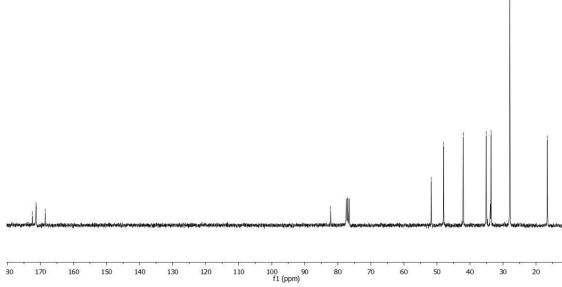






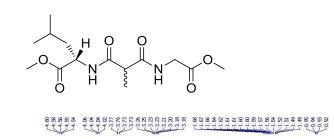
Methyl 3-{3-[(2-tert-butoxy-2-oxoethyl)amino]-2-methyl-3-oxopropanamido}propanoate (2b)

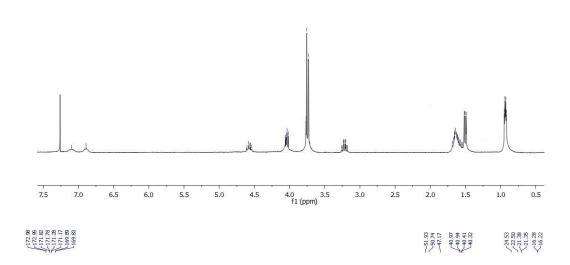


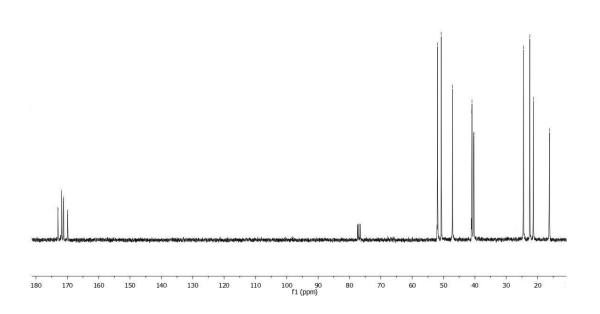


7.10

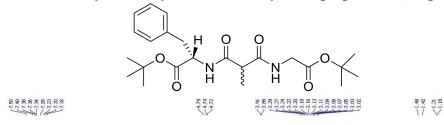
Methyl (2S)-2-[3-(2-methoxy-2-oxoethylamino)-2-methyl-3-oxopropanamido]-4-methylpentanoate (2c)

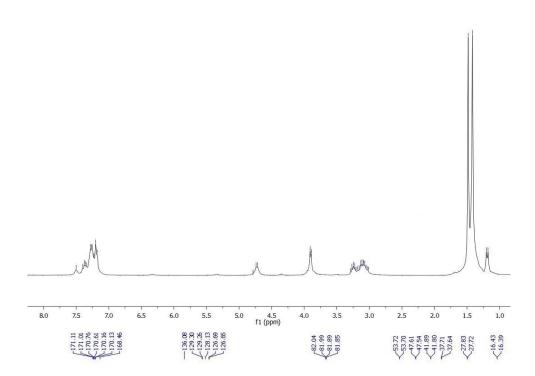


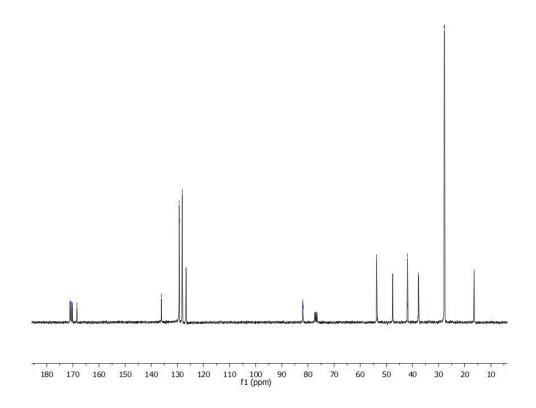




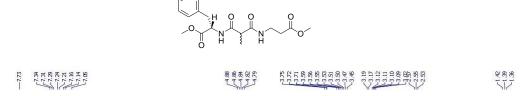
$tert\text{-}Butyl\ (2S)\text{-}2\text{-}\{3\text{-}[(2\text{-}tert\text{-}butoxy\text{-}2\text{-}oxoethyl)amino}]\text{-}2\text{-}methyl\text{-}3\text{-}oxopropanamido}\}\text{-}3\text{-}phenylpropanoate}\ (2d)$

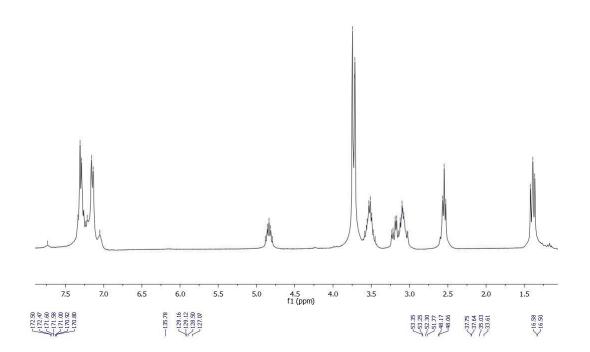


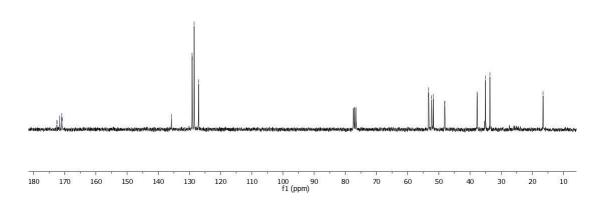




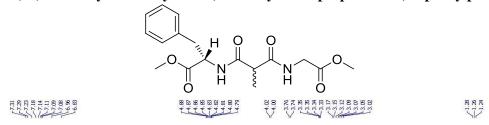
$Methyl~(2S)-2-\{3-[(3-methoxy-3-oxopropyl)amino]-2-methyl-3-oxopropanamido\}-3-phenylpropanoate~(2e)$

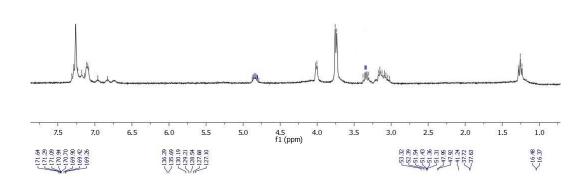


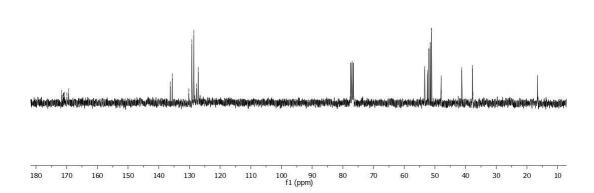




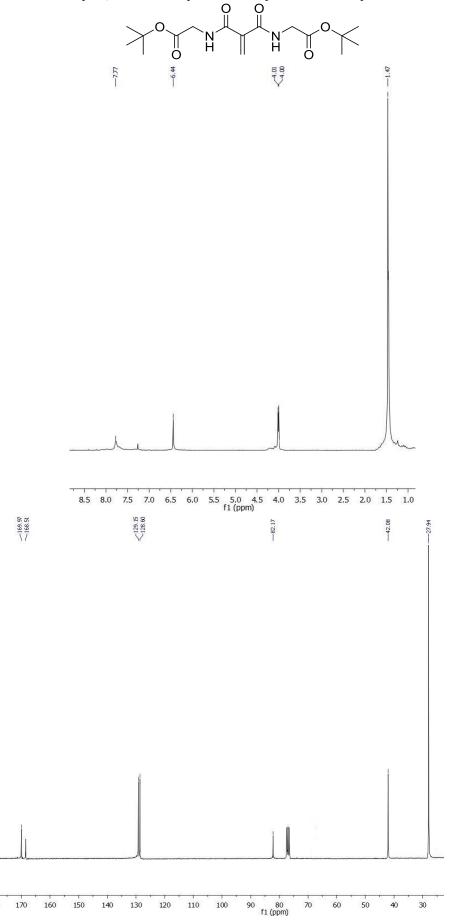
Methyl (2S)-2-(3-(2-methoxy-2-oxoethylamino)-2-methyl-3-oxopropanamido)-3-phenylpropanoate (2f)



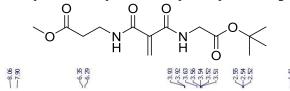


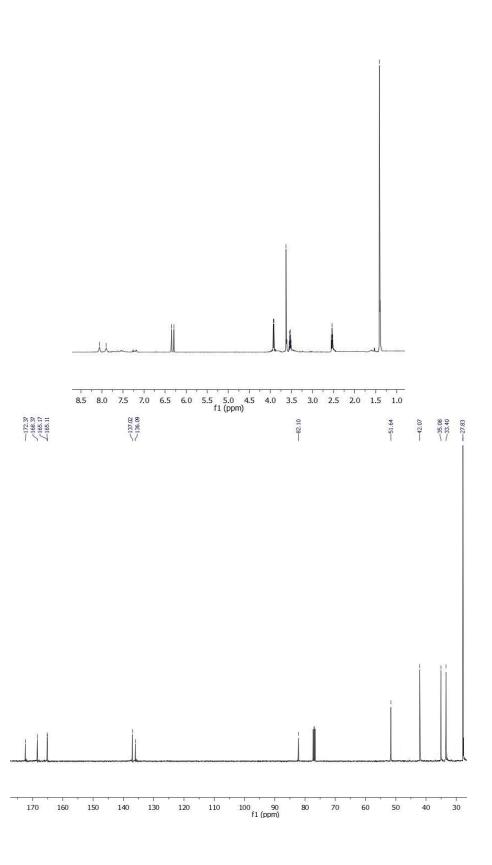




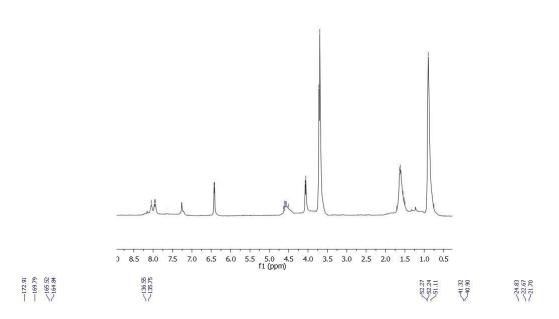


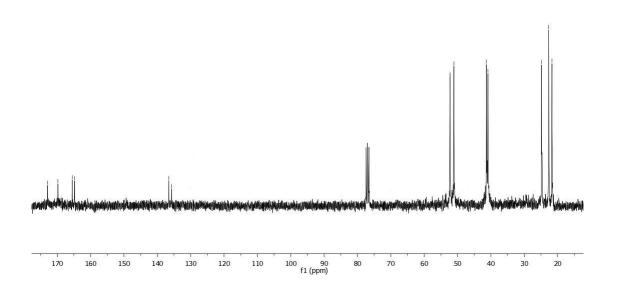
Methyl 3-[2-(2-tert-butoxy-2-oxoethylcarbamoyl)acrylamido]propanoate (3b)



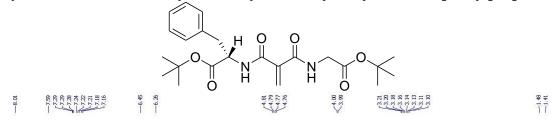


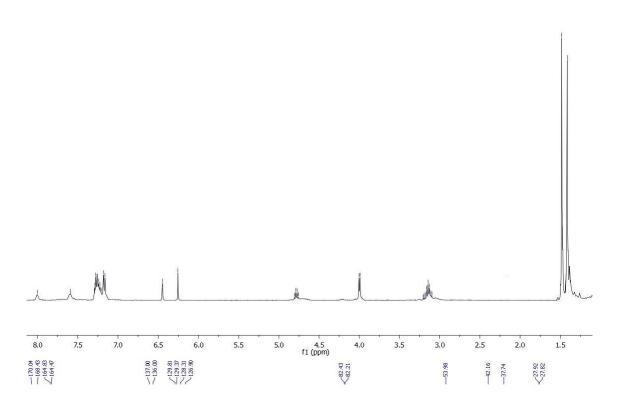
Methyl (2S)-2-[(2-{[(2-methoxy-2-oxoethyl)amino]carbonyl}acryloyl)amino]-4-methylpentanoate (3c)

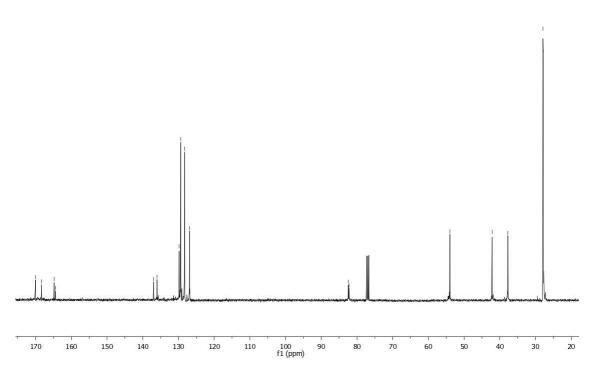




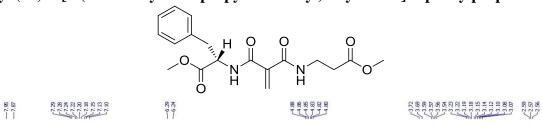
tert-Butyl (2S)-2-[2-(2-tert-butoxy-2-oxoethylcarbamoyl)acrylamido]-3-phenylpropanoate (3d)

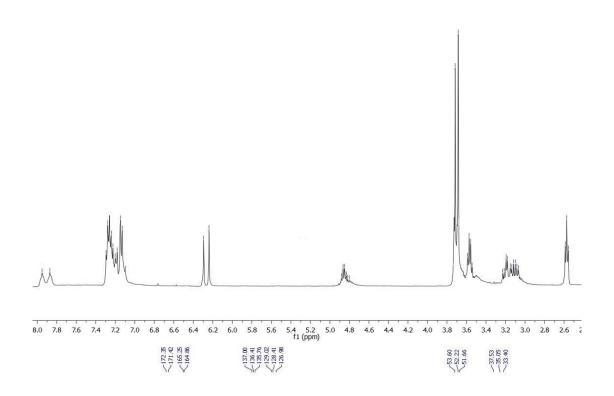


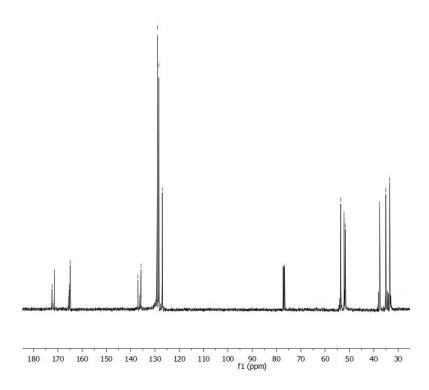




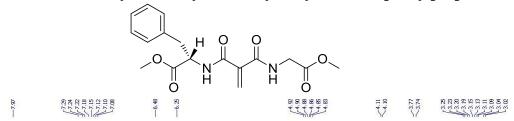
Methyl (2S)-2-[2-(3-methoxy-3-oxopropylcarbamoyl)acrylamido]-3-phenylpropanoate (3e)

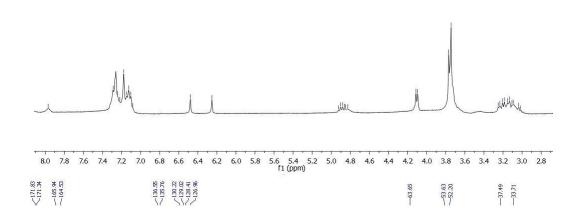


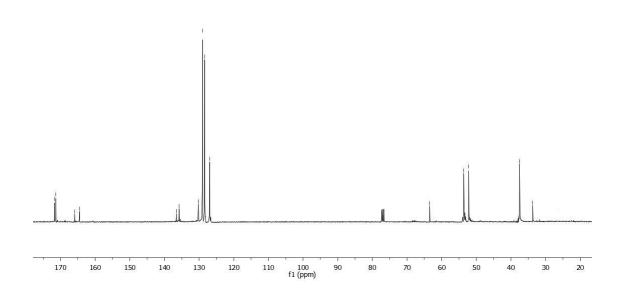




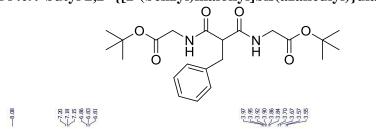
Methyl (2S)-2-[2-(2-methoxy-2-oxoethylcarbamoyl)acrylamido]-3-phenylpropanoate (3f)

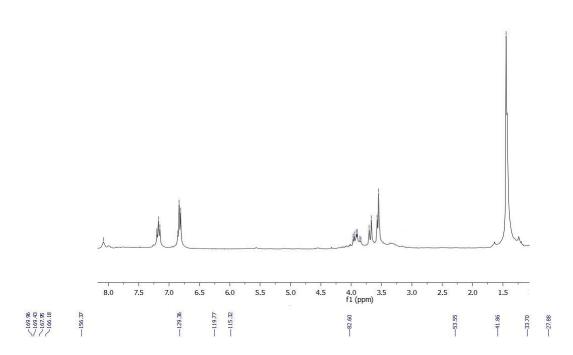


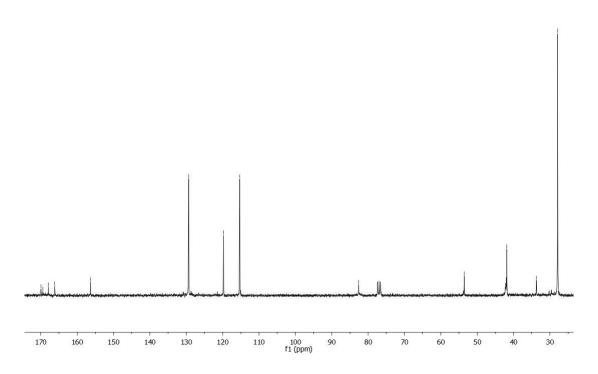


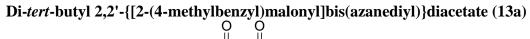


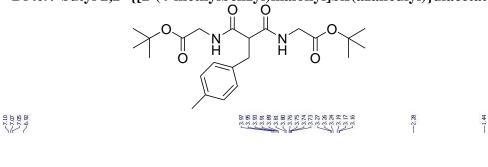
$\label{lem:condition} \textbf{Di-}\textit{tert-}\textbf{butyl 2,2'-}\{[2\text{-}(benzyl)malonyl]\textbf{bis}(azanediyl)\}\textbf{diacetate (5a)}$

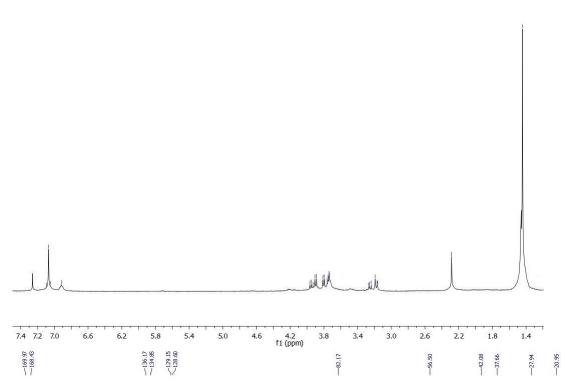


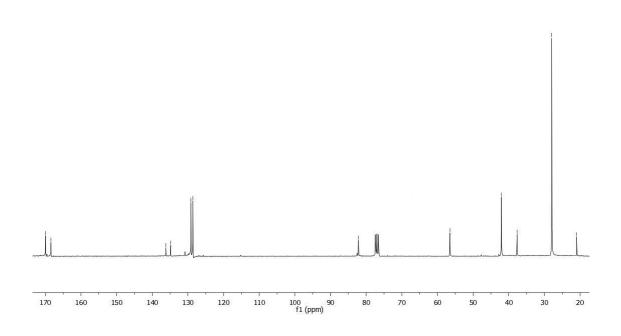


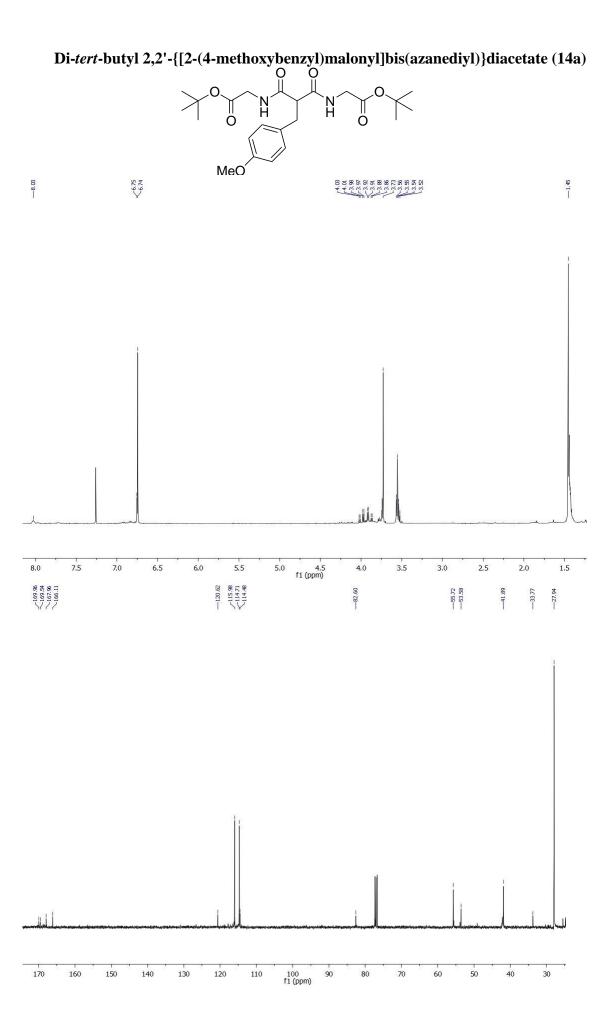


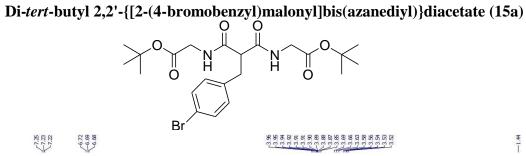


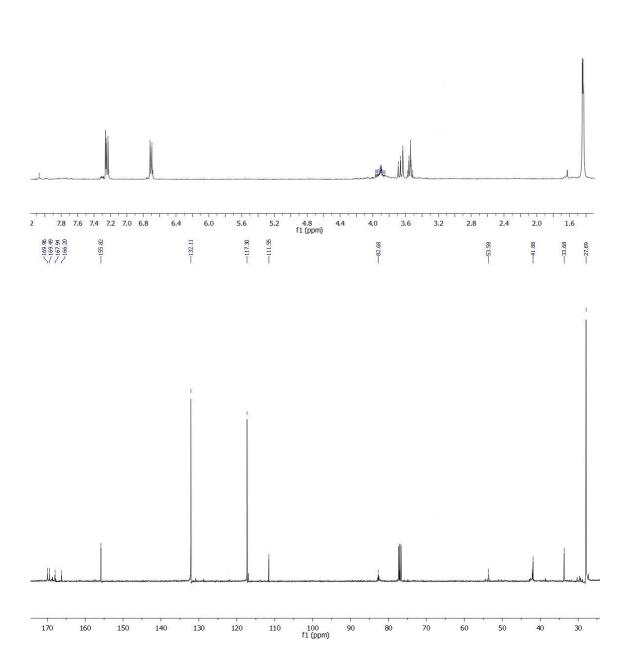


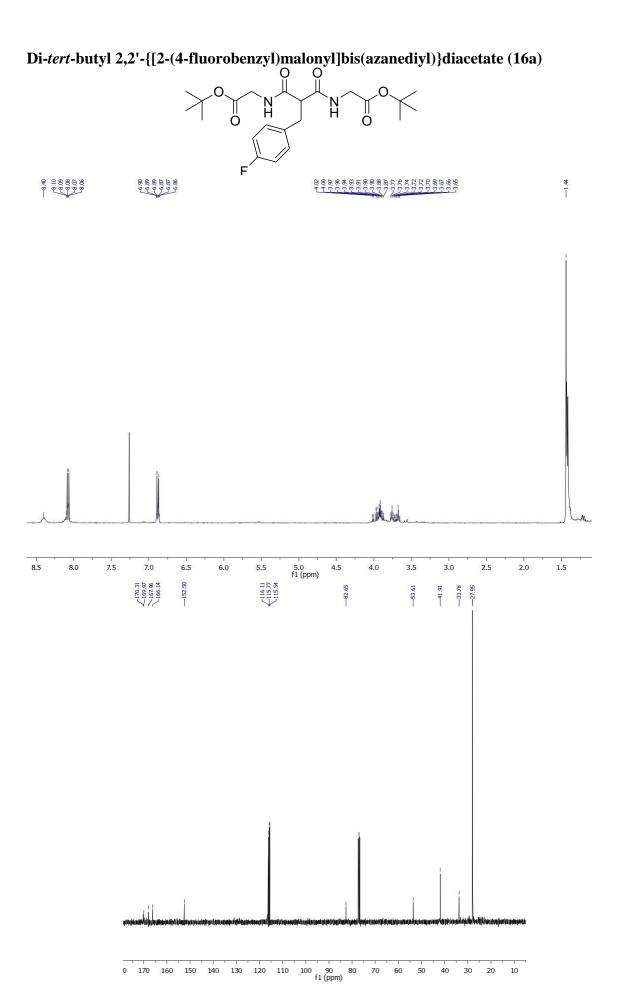


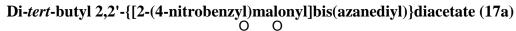


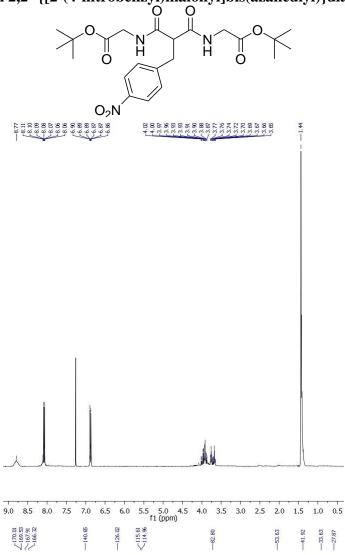


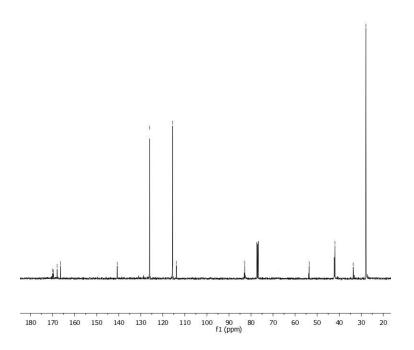




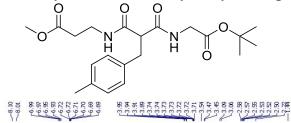


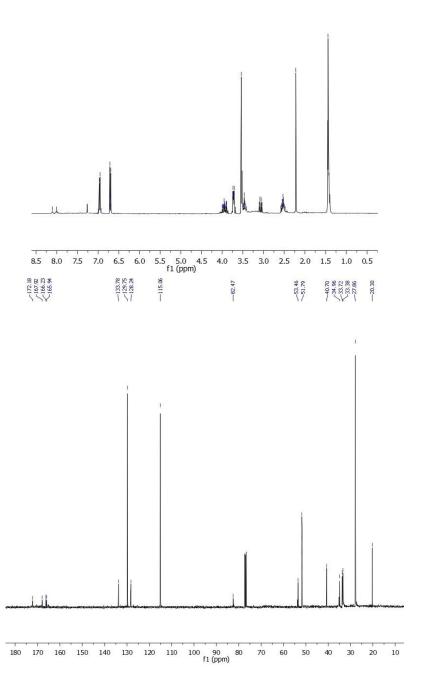




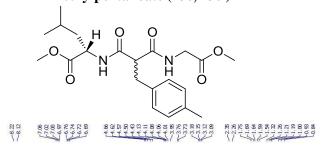


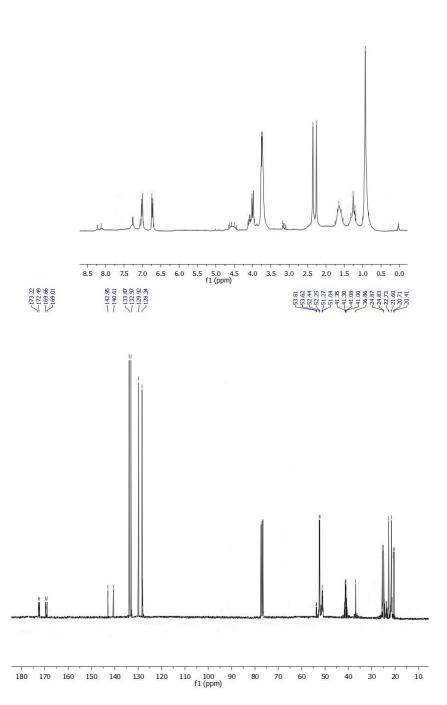
Methyl 3-{3-[(2-tert-butoxy-2-oxoethyl)amino]-2-(4-methylbenzyl)-3-oxopropanamido}propanoate (13b)



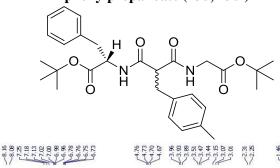


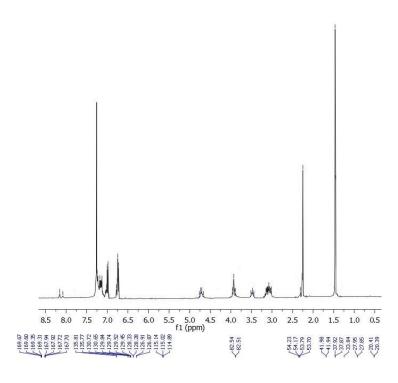
Methyl (2S)-2-[3-(2-methoxy-2-oxoethylamino)-2-(4-methylbenzyl)-3-oxopropanamido]-4-methylpentanoate (13c, 13c')

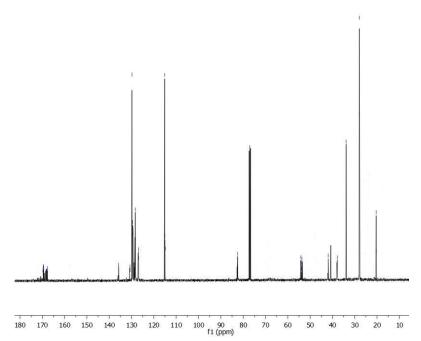




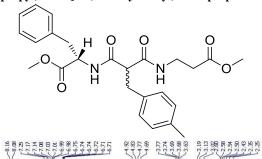
tert-Butyl (2S)-2-[3-(2-tert-butoxy-2-oxoethylamino)-2-(4-methylbenzyl)-3-oxopropanamido]-3-phenylpropanoate (13d, 13d')

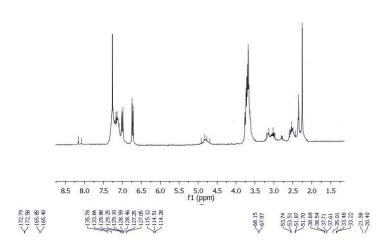


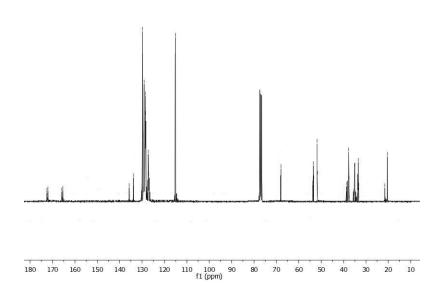




Methyl (2S)-2-{3-[(3-methoxy-3-oxopropyl)amino]-2-(4-methylbenzyl)-3-oxopropanamido}-3-phenylpropanoate (13e, 13e')







Methyl (2S)-2-(3-(2-methoxy-2-oxoethylamino)-2-(4-methoxybenzyl)-3-oxopropanamido)-3-phenylpropanoate (13f, 13f')

