

Kits for Methyl Groups Assignment

User-friendly solutions for the sequential assignment of Ala, Ile, Leu & Val methyl groups.

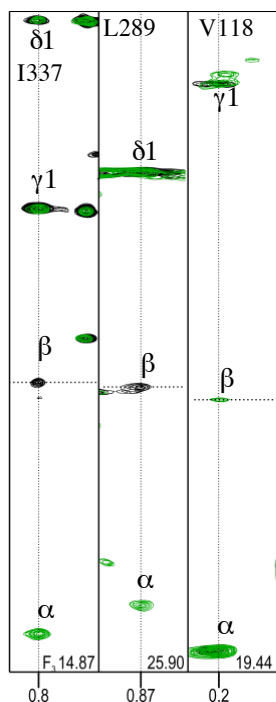
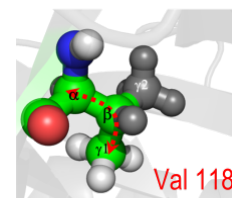
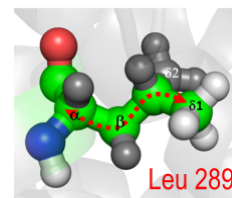
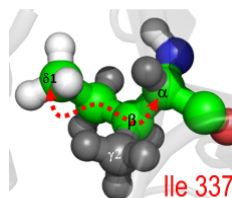
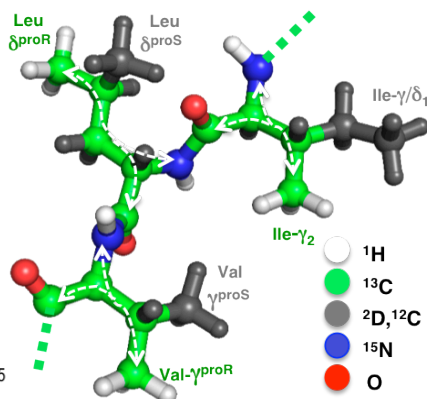
NMR-Bio has optimized kits for the assignment of Alanine, Isoleucine, Leucine and Valine residues. Precursors are designed to connect regio- or stereospecific labeled $^{13}\text{CH}_3$ group to the $^{15}\text{N}/^{13}\text{C}$ backbone nuclei via **a linear ^{13}C spin system**. Use our labeling kits to assign separately or simultaneously methyl groups of different amino acids.

Optimized labeling of Ile, Leu and Val for assignment. Protein was produced in $U-[^2\text{H},^{13}\text{C},^{15}\text{N}]$ M9 medium supplemented with **TLAM- $l\gamma^2\text{LV}^{\text{proR}}-U-[^{13}\text{C}]$** kits.

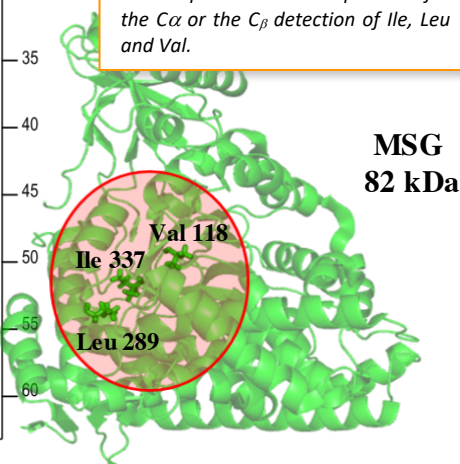
Recommended kits:

SLAM- $l\delta^1-^{13}\text{C}_5 / l\gamma^2-^{13}\text{C}_4 / A\beta-^{13}\text{C}_3$,

DLAM- $\text{LV}^{\text{proR}}-^{13}\text{C}_4$, TLAM- $l\delta^1\text{LV}^{\text{proR}}-U-[^{13}\text{C}]$,



Superimposition of 2D extracts of 3D out-and-back HCCH TOCSY of MSG protein produced in $U-[^2\text{H},^{13}\text{C},^{15}\text{N}]$ M9 medium supplemented with **TLAM- $l\delta^1\text{LV}^{\text{proR}}-U-[^{13}\text{C}]$** kit. The acquired NMR experiments were optimized for the $\text{C}\alpha$ or the $\text{C}\beta$ detection of Ile, Leu and Val.

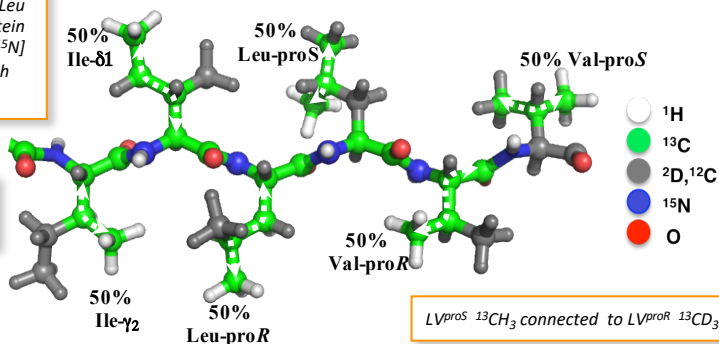


Sequential and side chains assignment with stereo- and regio- specific identification of all Ala, Ile, Leu and Val methyl groups using a single sample and a single NMR experiment !

The new NMR-Bio combinatorial labeling kit permits to assign simultaneously Ala- β , Ile- δ_1 , Ile- γ_2 , Leu- δ_1 , Leu- δ_2 , Val- γ_1 and Val- γ_2 using a single triple resonance NMR experiment (Out-and-Back HCCH TOCSY) and just one sample.

Optimized labeling of Ile, Leu and Val for assignment. Protein was produced in $U\text{-}[^2\text{H}, ^{13}\text{C}, ^{15}\text{N}]$ M9 medium supplemented with TLAM- $\text{I}^{\gamma_2/\delta_1}$ LV $^{\text{proR/proS}}$

I^{γ_2} , I^{δ_1} & LV $^{\text{proR}}$ $^{13}\text{CH}_3$ connected to backbone



Examples of kits	$^{13}\text{CH}_3$ groups Labeled	Prices* (1 kit for 1 L. of culture)
SLAM- $\text{I}^{\delta_1}\text{-}^{13}\text{C}_5$	Ile $^{\delta_1}$	385 €
SLAM- $\text{I}^{\gamma_2}\text{-}^{13}\text{C}_4$	Ile $^{\gamma_2}$	640 €
SLAM-V $^{\text{proR}}\text{-}^{13}\text{C}_4$	Val $^{\text{proR}}$	530 €
DLAM-LV $^{\text{proR}}\text{-}^{13}\text{C}_4$	Leu $^{\text{proR}}$ Val $^{\text{proR}}$	440 €
DLAM-LV $^{\text{proY}}$	Leu $^{\text{proS}}$ Val $^{\text{proS}}$ LV $^{\text{proS}}$ $^{13}\text{CH}_3$ connected to LV $^{\text{proR}}$ $^{13}\text{CD}_3$ Through a linear ^{13}C spin system	430 €
DLAM- $\text{I}^{\delta_1}\text{V}^{\text{proR}}\text{-U-}[^{13}\text{C}]$	Ile $^{\delta_1}$ Val $^{\text{proR}}$	925 €
DLAM- $\text{I}^{\gamma_2}\text{V}^{\text{proR}}\text{-U-}[^{13}\text{C}]$	Ile $^{\gamma_2}$ Val $^{\text{proR}}$	970 €
TLAM- $\text{I}^{\gamma_2}\text{LV}^{\text{proR}}\text{-U-}[^{13}\text{C}]$	Ile $^{\gamma_2}$ Leu $^{\text{proR}}$ Val $^{\text{proR}}$	870 €
TLAM- $\text{I}^{\delta_1}\text{LV}^{\text{proR}}\text{-U-}[^{13}\text{C}]$	Ile $^{\delta_1}$ Leu $^{\text{proR}}$ Val $^{\text{proR}}$	825 €
TLAM- $\text{I}^{\gamma_2/\delta_1}\text{LV}^{\text{proR/proS}}$ $\text{I}^{\delta_1/\gamma_2}$ & LV $^{\text{proR}}$ $^{13}\text{CH}_3$ connected to backbone LV $^{\text{proS}}$ $^{13}\text{CH}_3$ connected to LV $^{\text{proR}}$ $^{13}\text{CD}_3$	Ile $^{\delta_1/\gamma_2}$ Leu $^{\text{proR/proS}}$ Val $^{\text{proR/proS}}$ Kerfah et al., J Biomol NMR. 2015; 63(4):389-402	950 €

For any kit including $U\text{-}^{13}\text{C}\text{-Ala-}\beta$, please inquire !

– ACADEMIC RESEARCH USE ONLY –

* The listed prices exclude shipping fees and importation tax. Discounts apply for larger quantities. For specific quote contact us at sales@nmr-bio.com.