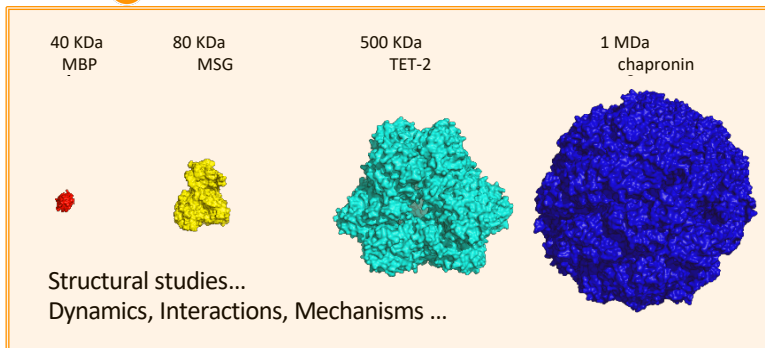


Investigate protein assemblies with molecular weight up to 1 MDa!



Introduce **NMR-Bio** SLAM kits in a perdeuterated minimum medium, to achieve high incorporation levels of $^{13}\text{CH}_3$ isotopomer only in a single type of methyl groups (*i.e.* Val-proS, Ala- β , Thr- γ etc. ...) without detectable scrambling.

Reduce spectral overlaps using **NMR-Bio** combinatorial labeling kits, designed to label simultaneously different types of Methyl probes well separated in Methyl-TROSY spectra.

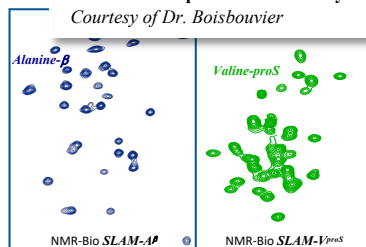
Recommended kits: SLAM-A β / I δ^1 / M ϵ / T γ / VproS

Detection of long-range nOes in supramolecular assemblies: **NMR-Bio** scrambling free labeling solutions are optimized for the extraction of precise and long-range nOe distance restraints between methyl probes in perdeuterated proteins. Compared to standard 2-keto acids, NMR-Bio acetolactate precursors increase sensitivity by up to a factor of 4, allowing for the detection of structurally meaningful long-range and intermolecular nOes restraints.

Filtering of inter-molecular nOes in supramolecular assemblies: Use **NMR-Bio** kits to filter inter- from intra-molecular nOes and get more precise structural information to refine your homo-oligomeric protein structure. Using our regio- and stereo-specific labeling (*ie.* Ile- γ 2, Ile- δ 1, Leu-proS, Leu-proR, Val-proS and Val-proR), the inter-molecular nOes filtering of the same residue is achievable!

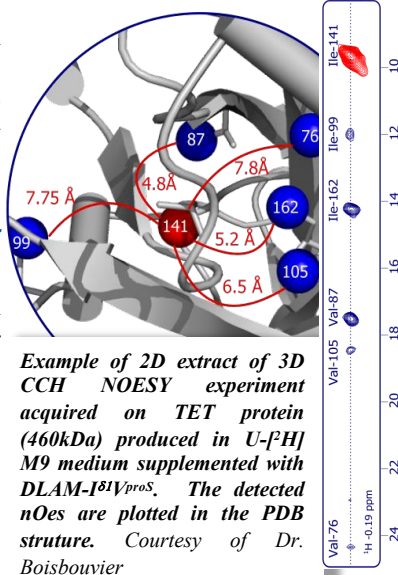
Recommended kits: DLAM- A β I δ^1 / A β M ϵ / I δ^1 M ϵ / I δ^1 T γ / I δ^1 VproS / I γ^2 VproR / I δ^1 LproS / I γ^2 LproR / M ϵ VproS / M ϵ T γ ; TLAM- A β I δ^1 VproS / A β I δ^1 M ϵ / I δ^1 M ϵ VproS

2D Methyl-TROSY spectra of a 468 kDa protein assembly.
Courtesy of Dr. Boisbouvier



References:

Kerfah et al., *Curr Opin Struct Biol.* 2015, 32:113-22; Gans et al., *Angew Chem Int Ed Engl.* 2010; 3: 49(11):1958-62



NMR-Bio kits

Our patented precursors are specifically deuterated and supplied as frozen user-friendly kits ready to use without requirement of any further chemical modification. All NMR-Bio kits are calibrated for addition into of deuterated M9 culture medium prior to induction. NMR-Bio kits have been optimized to incorporate $^{13}\text{CH}_3$ or $^{13}\text{CHD}_2$ isotopomers in selected methyl groups of proteins, with the possibility to incorporate a linear ^{13}C spin system connecting the specifically labeled methyl groups to the backbone nuclei. Kits are provided with precise protocols extensively tested *in-vivo* to ensure optimal incorporation of isotopes in targeted methyl groups without detectable scrambling in other positions.



NMR-Bio SLAM kits	A ^β $^{13}\text{CH}_3$	I ^{γ2} $^{13}\text{CH}_3$	I ^{δ1} $^{13}\text{CH}_3$	M ^ε $^{13}\text{CH}_3$	T ^γ $^{13}\text{CH}_3$	V ^{proS} $^{13}\text{CH}_3$
Prices* (1 kit for 1 L of culture)	900 €	550 €	110 €	410 €	740 €	495 €

Examples of kits	$^{13}\text{CH}_3$ groups Labeled	Prices* (1 kit for 1 L. of culture)
DLAM- LVproS	Leu ^{proS} Val ^{proS}	345 €
DLAM- I ^{δ1} M ^ε	Ile ^{δ1} Met ^ε	520 €
DLAM-A ^β I ^{δ1}	Ala ^β Ile ^{δ1}	975 €
DLAM- I ^{δ1} V ^{proS}	Ile ^{δ1} Val ^{proS}	605 €
DLAM-A ^β M ^ε	Ala ^β Met ^ε	1310 €
DLAM- M ^ε V ^{proS}	Met ^ε Val ^{proS}	905 €
DLAM-I ^{δ1} T ^γ	Ile ^{δ1} Thr ^γ	740 €
DLAM- M ^ε T ^γ	Met ^ε Thr ^γ	1150 €
TLAM-I ^{δ1} M ^ε V ^{proS}	Ile ^{δ1} Met ^ε Val ^{proS}	1015 €
TLAM-A ^β I ^{δ1} V ^{proS}	Ala ^β Ile ^{δ1} Val ^{proS}	1220 €
TLAM-A ^β I ^{δ1} M ^ε	Ala ^β Ile ^{δ1} Met ^ε	1385 €

For any kit including Val-proR & Leu-proR, please inquire !

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