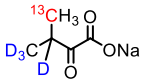
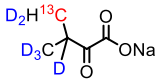
MOLECULAR ARCHITECTURE GROUP

Precursors Catalog 2022

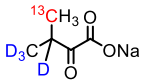
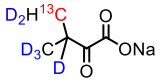
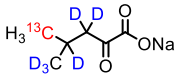
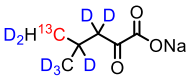
MAG – Molecular Architecture Group – brings together scientists who believe that today's challenges in biomedicine and in developing new drugs require new molecular design principles

We offer a toolbox of stable-isotope labeled small molecules: these compounds are applied to decorate proteins with deuterium and/or carbon-13 at defined atomic positions, creating tailor-made samples for your biomolecular NMR experiment

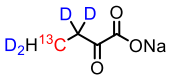
Valine

Structure	Compound number	Target residue	Price/100mg	Minimal concentration for ~90% labeling of the target residue *	Literature references
	*L03*	*Val or Leu/Val*	€220	80-120mg/L	*J. Am. Chem. Soc.* 2004, *126*, 5348-5349. and *J. Biomol. NMR* 2013, *57*, 205-209.
	*L04*	*Val or Leu/Val*	€370	80-120mg/L	

Leucine

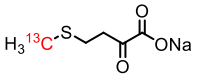
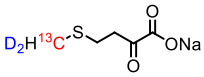
Structure	Compound number	Target residue	Price/100mg	Minimal concentration for ~90% labeling of the target residue *	Literature references
	*L03*	*Val or Leu/Val*	€220	80-120mg/L	*J. Am. Chem. Soc.* 2004, *126*, 5348-5349. and *J. Biomol. NMR* 2013, *57*, 205-209.
	*L04*	*Val or Leu/Val*	€370	80-120mg/L	
	*L05*	*Leu*	€400	100-150mg/L	*ChemBioChem* 2013, *14*, 818-821.
	*L06*	*Leu*	€900	100-150mg/L	

Isoleucine

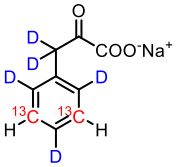
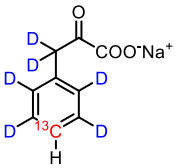
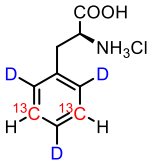
Structure	Compound number	Target residue	Price/100mg	Minimal concentration for ~90% labeling of the target residue *	Literature references
	L01	*Ile*	€150	80-120mg/L	*J. Am. Chem. Soc.* 2004, *126*, 5348-5349.
	*L02*	*Ile*	€500	80-120mg/L	

* The concentrations needed to obtain a certain isotope incorporation level depend on the target protein, as well as the expression system.

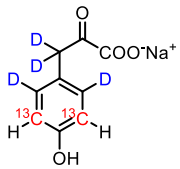
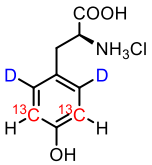
Methionine

Structure	Compound number	Target residue	Price/100mg	Minimal concentration for ~90% labeling of the target residue *	Literature references
	*L07*	*Met*	€400	100-150mg/L	*ChemBioChem 2007, 8, 610-612.*
	*L08*	*Met*	€800	100-150mg/L	

Phenylalanine

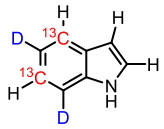
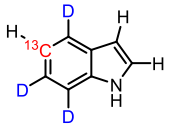
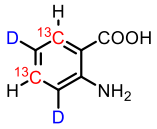
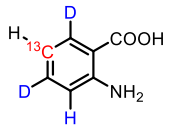
Structure	Compound number	Target residue	Price/100mg	Minimal concentration for ~90% labeling of the target residue *	Literature references
	*R01*	*Phe*	€600	80-120mg/L	*J. Biomol. NMR 2013, 57, 327-331.*
	*R02*	*Phe*	€600	80-120mg/L	*J. Biomol. NMR 2013, 57, 327-331.*
	*R03*	*Phe*	€900		

Tyrosine

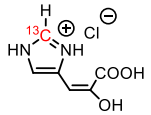
Structure	Compound number	Target residue	Price/100mg	Minimal concentration for ~90% labeling of the target residue *	Literature references
	*R04*	*Tyr*	€400	120-150mg/L	*J. Biomol. NMR 2013, 57, 327-331.*
	*R05*	*Tyr*	€600		

* The concentrations needed to obtain a certain isotope incorporation level depend on the target protein, as well as the expression system.

Tryptophan

Structure	Compound number	Target residue	Price/100mg	Minimal concentration for ~90% labeling of the target residue *	Literature references
	*R07*	*Trp*	€800	20-30mg/L	*ChemBioChem 2015, 16, 746-751.*
	*R08*	*Trp*	€700	20-30mg/L	*ChemBioChem 2015, 16, 746-751.*
	*R09*	*Trp*	€700	15-25mg/L	*J. Biomol. NMR 2017, 69, 13-22.*
	*R10*	*Trp*	€700	15-25mg/L	*J. Biomol. NMR 2017, 69, 13-22.*

Histidine

Structure	Compound number	Target residue	Price/100mg	Minimal concentration for ~90% labeling of the target residue *	Literature references
 75% ^{13}C content at ε_1	*R06*	*His*	€700	75-100mg/L	*ChemBioChem 2017, 18, 1487-1491.*

Please contact us at **roman.lichtenecker@mag-lab.eu** for further information regarding quote inquiries, delivery times or technical questions. Let us know if your desired precursor is not listed in our compound collection.

https://www.mag-lab.eu/

* The concentrations needed to obtain a certain isotope incorporation level depend on the target protein, as well as the expression system.