New Lab Essential Starter Program

Life Science Chemistry Essentials from Merck

Merck offers a broad range of premium chemistry reagents including building blocks, catalysts, organometallics, and synthetic reagents. In addition, we provide a complete range of products and tools to make your lab a safer place to work. Make us your preferred supplier for all your laboratory reagents, and spend more time on research (and less on ordering and maintaining your supply of fundamental chemicals).

For a complete listing of our chemistry reagents visit: **SigmaAldrich.com/chemistry**

Building Blocks

Cat. No.	Product Description	Check
A88107-100G	p-Anisaldehyde, 98%	☐
137448-100G	2-Methyl-2-oxazoline, 98%	☐
P56607-5G	Pyrazole, 98%	☐
194921-10G	*N*-(2,6-Dimethylphenyl)chloroacetamide, 99%	☐
238813-1G	(±)-6-Hydroxy-2,5,7,8-tetramethylchromane-2-carboxylic acid, 97%	☐
252646-25G	(Trimethylsilyl)isocyanate, 85%	☐
39565-50G	1,3-Dimethylbarbituric acid, ≥99.0%	☐
H0751-500MG	Homogentisic acid, crystalline	☐
471291-25ML	Isopropylamine, ≥99.5%	☐
T89702-1G	Tropolone, 98%	☐
02270-10G	Adrenalone hydrochloride	☐
S356-100G	Salicylaldehyde, 98%	☐
528056-100ML	Thioglycolic acid, ≥99%	☐
I17451-25G	Isonicotinamide, 99%	☐
240338-50G	2-Pyrrolidinone, ≥99%	☐
H40807-1G	5-Hydroxymethyl-2-furaldehyde, 99%	☐
40727-100ML	*N,N′*-Dimethylethyleneurea, ≥99.0%	☐
T72605-100ML	Trimethylacetyl chloride, 99%	☐
16772-200G	Cyanogen bromide, ≥98.5%	☐
212849-25G	Trimethylsilyl cyanide, 98%	☐
270245-25G	4-Methoxybenzyl chloride, 98%	☐
B17905-25G	Benzyl bromide, 98%	☐
148938-5G	2-Iodopropane, 99%	☐
D79403-25G	Bicyclohexyl, 99%	☐
278610-1G	Moroxydine hydrochloride, 99%	☐

And for more Building block (chiral, heterocyclic..) visit sigma-aldrich web site and check your special price (discount up to 20% off) with your order login.

Reagents Essentials

Cat. No.	Product Description	Check
Synthetic Reagents		
199877-25G	Lithium aluminum hydride powder, reagent grade, 95%	☐
212776-100ML	Lithium aluminum hydride solution 1.0 M in THF	☐
593702-100ML	Lithium aluminum hydride solution 2.0 M in THF	☐
241814-100ML	Lithium tri-*tert*-butoxyaluminum hydride solution 1.0 M in THF	☐
214981-100ML	Diisobutylaluminum hydride solution 1.0 M in THF	☐
190306-100ML	Diisobutylaluminum hydride solution 1.0 M in hexanes	☐
225541-25G	Diisopropyl azodicarboxylate (DIAD), 95%	☐
774766-100ML	Lithium diisopropylamide solution (LDA),1.0 M in THF/hexanes	☐
179752-25G	Borane pyridine complex	☐
176192-100ML	Borane tetrahydrofuran complex solution 1.0 M in THF	☐
192120-100ML	Borane dimethyl sulfide complex solution 2.0 M in THF	☐
139009-100G	1,8-Diazabicyclo[5.4.0]undec-7-ene (DBU), 98%	☐
273031-25G	3-Chloroperbenzoic acid, ≤77%	☐
D80002-25G	*N,N′*-Dicyclohexylcarbodiimide (DCC), 99%	☐
224847-50G	Iodine monobromide, 98%	☐
109681-100G	*N*-Chlorosuccinimide, 98%	☐
B81255-100G	*N*-Bromosuccinimide, 99%	☐
221732-100G	Sodium tetraborate, 99%	☐
175501-100ML	Boron trifluoride diethyl etherate	☐
702706-100ML	Sodium *tert*-butoxide solution 2 M in THF	☐
156671-25G	Potassium *tert*-butoxide, ≥98%	☐
130672-25G	*N*-Hydroxysuccinimide, 98%	☐
D125407-100G	*N,N′*-Diisopropylcarbodiimide (DIC), 99%	☐
D80002-100G	*N,N′*-Dicyclohexylcarbodiimide (DCC), 99%	☐
21860-25G	1,1′-Carbonyldiimidazole (CDI), ≥97.0%	☐
184225-100G	Hydrogen fluoride pyridine, pyridine ~30 %, hydrogen fluoride ~70 %	☐
190500-25G	*tert*-Butyldimethylsilyl chloride (TBDMSCl), 97%	☐
471259-100ML	Methanesulfonyl chloride, ≥99.7%	☐
A29585-100G	Allyl bromide, 99%	☐
O8801-100G	Oxalyl chloride reagent grade, 98%	☐
201170-250G	Phosphorus(V) oxychloride, 99%	☐
452882-100G	Sodium borohydride powder, ≥98.0%	☐
156159-10G	Sodium cyanoborohydride, 95%	☐
452912-100G	Sodium hydride 60 % dispersion in mineral oil	☐
214000-5G	TEMPO, 98%	☐
651664-25G	Tetrabutylammonium azide	☐
344648-100G	Triethylamine trihydrofluoride, 98%	☐
176176-10G	Trifluoromethanesulfonic anhydride, ≥99%	☐
C4706-2G	Tris(2-carboxyethyl)phosphine hydrochloride (TCEP), ≥98%	☐
386529-100ML	Chlorotrimethylsilane, redistilled, ≥99%	☐
92361-1L	Chlorotrimethylsilane, ≥98.0%	☐
195529-5G	Iodotrimethylsilane, 97%	☐
233781-50G	Triisopropylsilane, 98%	☐
78181-10G	Phenylboronic acid, ≥97.0%	☐
417556-25G	4-Fluorophenylboronic acid	☐
655856-5G	Pinacolborane, 97%	☐
473294-100G	Bis(pinacolato)diboron, 99%	☐
188913-25G-A	Catecholborane, 98%	☐
And many more reagents and chemical specialties on sigma-aldrich web site		
Organometallics		
225754-100ML	Allylmagnesium bromide solution 1.0 M in diethyl ether	☐
703583-100ML	Methylmagnesium bromide solution ~3.4 M in 2-methyltetrahydrofuran	☐
186171-4X25ML	n-Butyllithium solution 1,6 M in hexanes	☐
230707-4X25ML	n-Butyllithium solution 2.5 M in hexanes	☐
186198-100ML	*tert*-Butyllithium solution 1.7 M in pentane	☐
189901-100ML	Methylmagnesium chloride solution 3.0 M in THF	☐
189898-100ML	Methylmagnesium bromide solution 3.0 M in diethyl ether	☐
225584-100ML	Vinylmagnesium bromide solution 1.0 M in THF	☐
224499-800ML	*tert*-Butylmagnesium chloride solution 2.0 M in diethyl ether	☐
197343-100ML	Methyllithium solution 1.6 M in diethyl ether	☐

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186198-100ML	*tert*-Butyllithium solution 1.7 M in pentane	☐
296112-100ML	Diethylzinc solution 1.0 M in hexanes	☐
680982-50ML	Cyclopropylzinc bromide solution 0.5 M in THF	☐
Asymmetric Synthesis		
392758-50G	AD-mix-α	☐
392766-50G	AD-mix-β	☐
268070-5G	(+)-α-Pinene, ≥99%, ee: 97%	☐
712264-100MG	Cytisine, ≥99%	☐
C2107-100G	(1S)-(+)-10-Camphorsulfonic acid, 99%	☐
345849-100G	Dibenzoyl-L-tartaric acid, 98%	☐
441058-25ML	(1R)-(−)-Menthyl acetate, 98%	☐
325058-1G	(S)-(+)-3-Bromo-2-methyl-1-propanol, 97%	☐
679380-1G	(R)-(−)-2-Aminobutanamide hydrochloride, 96%	☐
457698-5ML	(R)-(+)-2-Methyl-CBS-oxazaborolidine solution	☐
684120-100MG	(1S,2S)-1,2-Bis(4-methoxyphenyl)ethylenediamine dihydrochloride, 96%	☐

Catalysis

Cat. No.	Product Description	Check
Ligands		
638064-1G	XPhos, 97%	☐
638064-5G	XPhos, 97%	☐
638080-1G	*t*BuXPhos, 97%	☐
638080-5G	*t*BuXPhos, 97%	
695459-2G	meCgPPh, 97%	☐
261971-5G	Tricyclohexylphosphine	☐
570958-1G	Tri-*tert*-butylphosphine, 98%	☐
T84603-25G	Triphenylphosphine oxide (TPPO), 98%	☐
526460-1G	XantPhos, 97%	☐
666564-1G	*N*-XantPhos, 97%	☐
Metal sources		
216666-1G	Tetrakis(triphenylphosphine)palladium(0), 99%	☐
216666-5G	Tetrakis(triphenylphosphine)palladium(0), 99%	☐
379670-5G	$Pd(dppf)Cl_2 \cdot CH_2Cl_2$	☐
683124-5G	Palladium(II) acetate, 98%	☐
243469-100G	Zinc, granular, 20-30 mesh, ≥99.8%	☐
206032-5G	Platinum(IV) oxide, surface area ≥60 m2/g	☐
221775-100G	Copper(II) bromide, 99%	☐
86710-50ML	Titanium(IV) ethoxide	☐
244988-2G	Bis(1,5-cyclooctadiene)nickel(0)	☐
72240-100G	Aluminum-nickel alloy, 50% Ni + 50% Al	☐
Complexes		
199982-1G	Tris(triphenylphosphine)rhodium(I) chloride, Wilkinson's catalyst	☐
579726-1G	Grubbs Catalyst™ 1st Generation, 97%	☐
569747-500MG	Grubbs Catalyst™ 2nd Generation	☐
569755-100MG	Hoveyda-Grubbs Catalyst™ 2nd Generation	☐
708739-1G	tBuXPhos Pd G1 (Buchwald 1st Generation Palladacycle)	☐
718750-100MG	BrettPhos Pd G1, Methyl t-Butyl Ether Adduct (Buchwald 1st Generation Palladacycle)	☐
741825-1G	XPhos Pd G2 (Buchwald 2nd Generation Palladacycle)	☐

Product list to be continued on SigmaAldrich.com

Novabiochem

Cat. No.	Product Description	Check
8520030025	Fmoc-Ala-OH 25g	☐
8520030100	Fmoc-Ala-OH 100g	☐
8520010025	Fmoc-Gly-OH 25g	☐
8520010100	Fmoc-Gly-OH 100g	☐
8520110025	Fmoc-Leu-OH 25g	☐
8520110100	Fmoc-Leu-OH 100g	☐
8520100025	Fmoc-Ile-OH 25g	☐
8520100100	Fmoc-Ile-OH 100g	☐
8520170025	Fmoc-Pro-OH 25g	☐

Cat. No.	Product Description	Check
8520170100	Fmoc-Pro-OH 100g	☐
8520670025	Fmoc-Arg(Pbf)-OH 25g	☐
8520080025	Fmoc-Cys(Trt)-OH 25g	☐
8530010025	Boc-Ala-OH 25g	☐
8530010100	Boc-Ala-OH 100g	☐
8530000025	Boc-Gly-OH 25g	☐
8530000100	Boc-Gly-OH 100g	☐
8530020025	Boc-Leu-OH · H2O 25g	☐
8530020100	Boc-Leu-OH · H2O 100g	☐
8530470025	Boc-Ile-OH · 0.5 H2O 25g	☐
8530470100	Boc-Ile-OH · 0.5 H2O 100g	☐
8530030025	Boc-Pro-OH 25g	☐
8530030100	Boc-Pro-OH 100g	☐
8530130025	Boc-Arg(Tos)-OH 25g	☐
8530490025	Boc-Cys(Acm)-OH	☐
8510850025	COMU 1-[(1-(Cyano-2-ethoxy-2-oxoethylideneaminooxy) dimethylaminomorpholino)] uronium hexafluorophosphate 25g	☐
8510060100	HBTU 2-(1H-Benzotriazole-1-yl)-1,1,3,3-tetramethyluronium hexafluorophosphate 100g	☐
8510860100	Oxyma Pure 100g	☐
8510090100	PyBOP 100g	☐
8550040025	Rink Amide AM resin (200-400 mesh) 25g	☐
8550030005	Rink Amide MBHA resin (100-200 mesh) 5g	☐
8550030025	Rink Amide MBHA resin (100-200 mesh) 25g	☐
8550010005	Rink Amide resin (100-200 mesh) 5g	☐

And for more Novabiochem reagents visit SigmaAldrich.com

NMR

Cat. No.	Product Description	Check
151793-10X0.75ML	Acetone-D6, 99.9 atom % D - ampules	☐
151793-10G	Acetone-D6, 99.9 atom % D - ampules	☐
151807-10X0.75ML	Acetonitrile-D3, 99.8 atom % D - ampules	☐
151807-10G-GL	Acetonitrile-D3, 99.8 atom % D - glass bottle	☐
151815-10X0.75ML	Benzene-D6, 99.6 atom % D - ampules	☐
151815-10G-GL	Benzene-D6, 99.6 atom % D - glass bottle	☐
151823-10X0.75ML	Chloroform-D, 99.8 atom % D - ampules	☐
151823-50G	Chloroform-D, 99.8 atom % D - glass bottle	☐
151858-10X0.75ML	Chloroform-D, "100" (MIN. 99.96 atom % D) - ampules	☐
225789-10X0.6ML	Chloroform-D, 99.8 atom % D (CONTAINS 0.3% TMS) - ampules	☐
151882-10X0.75ML	Deuterium oxide, 99.9 atom % D - ampules	☐
151882-10G	Deuterium oxide 99.9% - glass bottle	☐
151882-25G	Deuterium oxide, 99.9 atom % D - glass bottle	☐
151890-10X0.75ML	Deuterium oxide, "100%", ≥99.96 atom % - ampules	☐
151874-10X0.75ML	Dimethyl sulfoxide-D6, 99.9 atom % D - ampules	☐
151874-10G-GL	Dimethyl sulfoxide-D6, 99.9 atom % D - glass bottle	☐
441384-10X0.75ML	Methanol-D4, 99.8+ atom % D - ampules	☐
151947-10G-SB	Methanol-D4, 99.8+ atom % D - serum bottle	☐
151947-25G	Methanol-D4, 99.8+ atom % D - glass bottle	☐
Z565229-100EA	Wilmad® NMR tubes 5 mm diam., economy, limit 100 MHz frequency, L 7 in - pkg of 1000 ea	☐
Z271993-1PAK	Wilmad® NMR tubes 5 mm diam., precision limit 300 MHz frequency, L 7 in - pkg of 5 ea	☐
Z274275-1PAK	Wilmad® NMR tubes 5 mm diam., precision, limit 400 MHz frequency, L 7 in. - pkg of 5 ea	☐
Z562734-5EA	Wilmad® NMR tubes 5 mm diam., economy, limit 400 MHz frequency, L 7 in - pkg of 5 ea	☐