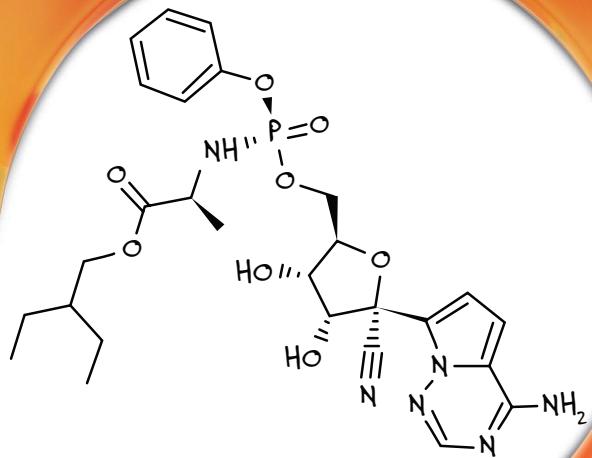


thermo scientific



Chemicals

# Organic synthesis of antivirals

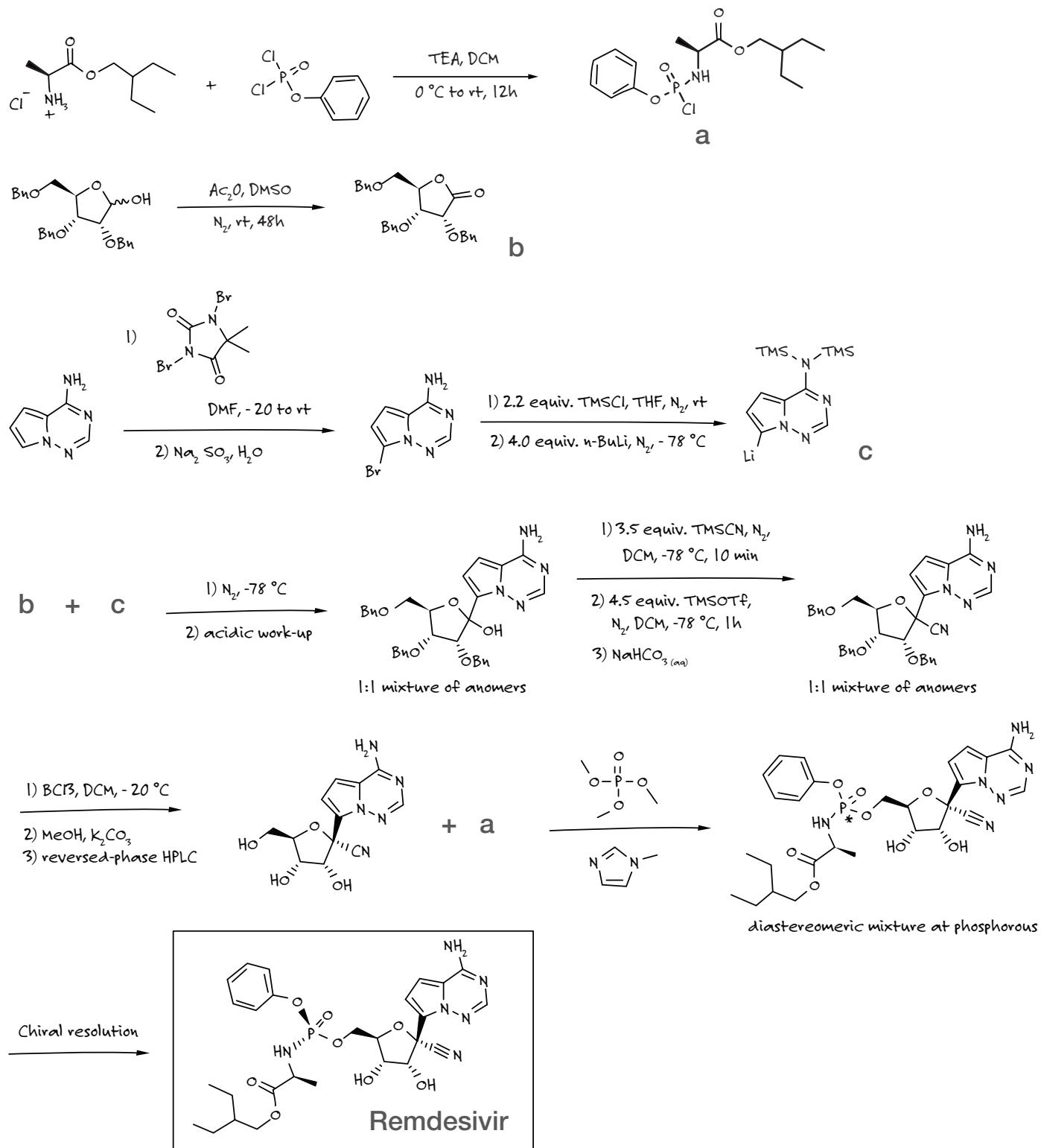
## Focus on Remdesivir

Find it at [eu.fishersci.com](http://eu.fishersci.com)

 **fisher** scientific  
part of Thermo Fisher Scientific

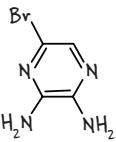
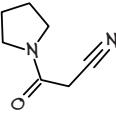
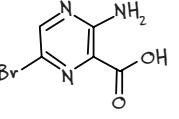
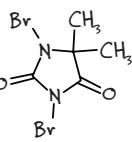
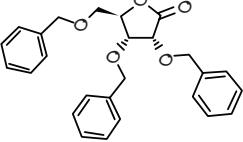
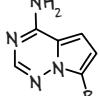
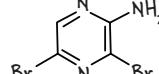
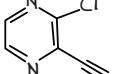
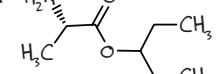
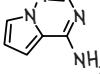
Research into novel antivirals is very complex. Most compounds with antiviral activity share interesting structural features, with heterocycle scaffolds, complex multifunctional nature and often several chiral centres.

Remdesivir has emerged as a particularly promising therapeutic agent to fight severe acute respiratory syndrome-related coronavirus (SARS-CoV-2) infections.



Patent WO 2017184668, Clarke MO, Jordan R, Mackman RL, Ray AS, Siegel D, "Preparation of amino acid-containing nucleosides for treating flaviviridae virus infections", published 26 October 2017, assigned to Gilead Sciences Inc

## Key building blocks for Remdesivir, Acalabrutinib and other antivirals

				
2,3-Diamino-5-bromopyrazine Stock no: MAY00135 CAS: 89123-58-0	1-(Cyanoacetyl)pyrrolidine, 98+%\br/>Stock no: A12523 CAS: 14227-95-3	3-Amino-6-bromopyrazine-2-carboxylic acid, 97% Stock no: 45742 CAS: 486424-37-7	1,3-Dibromo-5,5-dimethylhydantoin, 98% Stock no: A15510 CAS: 77-48-5	2,3,5-Tri-O-benzyl-D-ribonolactone Stock no: 46870 CAS: 937046-98-5
				
7-Bromopyrrolo[2,1-f][1,2,4]triazin-4-amine Stock no: 46870 CAS: 937046-98-5	2-Amino-3,5-dibromopyrazine, 97% Stock no: 39837 CAS: 24241-18-7	3-Chloropyrazine-2-carbonitrile Stock no: KM04911 CAS: 55557-52-3	(S)-2-Ethylbutyl 2-aminopropanoate hydrochloride Stock no: 46901 CAS: 946511-97-3	Pyrrolo[1,2-f][1,2,4]triazin-4-amine Stock no: 46899 CAS: 159326-68-8

From reaction planning to product purification and characterization, we have everything you need for successful organic synthesis results.

The comprehensive Thermo Scientific™ product portfolio includes building blocks, reagents, chemical essentials such as buffers, solvents, acids and bases for synthesising Remdesivir and many other complex molecules. Extra dry grades are offered in the innovative Acroseal packaging.

When you are ready to accelerate your synthetic organic chemistry, our high quality products are just what you need in your lab.

## Building blocks

IBS No.	Description	CAS No	Sizes
11402917	1,3-Dibromo-5,5-dimethylhydantoin, 98%	77-48-5	100 g, 500 g
11408606	1,3-Dimethyl-2-imidazolidinone, 98%	80-73-9	100 g, 500 g
11404284	1-Methylimidazole, 99%	616-47-7	100 g, 500 g, 2 kg
15406457	2,3,5-Tri-O-benzyl-D-ribofuranose, 98%	54623-25-5	1 g, 5 g
10082444	3-Chloropyrazine-2-carbonitrile, 97%	55557-52-3	1 g, 25 g
11386959	4-Carboxybenzeneboronic acid pinacol ester, 97%	180516-87-4	1 g, 5 g
11410017	4-Carboxyphenylboronic acid, 97%	14047-29-1	1 g, 5 g, 25 g
11483624	L-Alanine ethyl ester hydrochloride, 98%	1115-59-9	5 g, 25 g
10100462	L-Alanine methyl ester hydrochloride, 99%	2491-20-5	5 g, 25 g
11319729	N-Benzyloxycarbonyl-L-proline, 98+%	1148-11-4	5 g, 50 g, 250 g

## Essentials

IBS No.	Description	CAS No	Sizes
11412977	2-Butynoic acid, 98%	590-93-2	5 g, 25 g
10492411	Acetic acid, 99.8%, for analysis	64-19-7	250 mL, 1 L, 2.5 L
11357888	Acetonitrile, ACS, 99.5+%	75-05-8	500 mL, 1 L, 4 L, 4 x 1 L
10001310	Ammonia, ca. 7N solution in methanol, AcroSeal™	7664-41-7	100 mL, 800 mL
10396410	Dichloromethane, 99.8+%, for analysis, stabilized with amylene	75-09-2	1 L, 2.5 L, 5 L, 10 L, 25 L
10429252	Dichloromethane, 99.9%, Extra Dry, stabilized, AcroSeal™	75-09-2	100 mL, 1 L, 2.5 L
10573591	Ethyl acetate, 99.5%, for analysis	141-78-6	1 L, 2.5 L, 5 L, 25 L
10794821	Hydrochloric acid, for analysis, fuming, 37% solution in water	7647-01-0	500 mL, 1 L, 2.5 L, 10 L
11334996	Hydrogen bromide, pure, 33 wt% solution in glacial acetic acid	37348-16-6	500 mL, 1 L, 2.5 L
10792022	Isopropanol, 99.6%, ACS reagent	67-63-0	500 mL, 1 L, 2.5 L, 25 L
10317360	Methanol, 99.9%, for analysis	67-56-1	500 mL, 1 L, 2.5 L, 10 L, 25 L
10562841	Methyl sulfoxide, 99.8+%, extra pure	67-68-5	250 mL, 1 L, 2.5 L, 25 L
10370473	N,N-Dimethylformamide, 99.5%, for analysis	68-12-2	500 mL, 1 L, 2.5 L, 10 L, 25 L
10295761	N,N-Dimethylformamide, 99.8%, Extra Dry, AcroSeal™	68-12-2	100 mL, 1 L, 2.5 L
10674892	Potassium carbonate, 99+%, for analysis, anhydrous	584-08-7	1 kg, 5 kg, 25 kg
11404214	Trimethylsilyl trifluoromethanesulfonate, 99%	27607-77-8	10 g, 50 g, 250 g

## Reagents

IBS No.	Description	CAS No	Sizes
10519440	2-Aminopyridine	504-29-0	100 g, 500 g, 2.5 kg
11460107	2-Ethyl-1-butanol, 98%	97-95-0	500 mL, 2500 mL
11376876	Acetic anhydride, 99+%, for analysis	108-24-7	250 g, 1000 g, 2500 g
15408195	Boron trichloride, 1M solution in methylene chloride, AcroSeal™	10294-34-5	100 mL, 500 mL
11400244	Chlorotrimethylsilane, 98%	75-77-4	25 mL, 100 mL, 500 mL
11324499	Diethylamine, 99.5%, for analysis	109-89-7	100 mL, 500 mL, 2500 mL
13219522	HATU, 97%	148893-10-1	5 g, 25 g
11478456	N-Bromosuccinimide, 99%	128-08-5	250 g, 1000 g, 5000 g
10030462	n-Butyllithium, 2.5M solution in hexanes, AcroSeal™	109-72-8	100 mL, 800 mL
11478700	Oxalyl chloride, 98%	79-37-8	50 g, 100 g, 250 g, 1000 g
11418723	Phenyl dichlorophosphate, 99%	770-12-7	25 g, 100 g, 500 g
15480987	Phosphorus oxychloride, 99%	10025-87-3	250 g, 1 kg
10184473	Triethylamine, 99.7%, extra pure	121-44-8	5 g, 50 g, 1 kg, 2.5kg, 10 kg
11483264	Trimethyl phosphate, 99%	512-56-1	500 g, 2500 g
11494147	Trimethylsilyl cyanide, 98%	7677-24-9	5 g, 25 g, 100 g
11975871	Trimethylsilyl cyanide, 98%, AcroSeal™	7677-24-9	100 mL

## Catalysts

IBS No.	Description	CAS No	Sizes
11345988	Bis(triphenylphosphine)palladium(II) chloride, 98%	13965-03-2	1 g, 5 g, 25 g
15487225	Dichloro[1,1'-bis(diphenylphosphino)ferrocene]palladium(II), Pd 13.0-14.5%	72287-26-4	1 g
10243353	Raney®-Nickel, activated catalyst, 50% slurry in water	7440-02-0	100 g, 500 g

Browse the complete portfolio of products supporting organic synthesis of antivirals. For more information visit our website: [eu.fishersci.com/go/thermo-scientific-chemicals](http://eu.fishersci.com/go/thermo-scientific-chemicals)

Distributed by Fisher Scientific. Contact us today:

**Austria:** fishersci.at   **Belgium:** fishersci.be   **Denmark:** fishersci.dk  
**Germany:** fishersci.de   **Ireland:** fishersci.ie   **Italy:** fishersci.it  
**Finland:** fishersci.fi   **France:** fishersci.fr   **Netherlands:** fishersci.nl  
**Norway:** fishersci.no   **Portugal:** fishersci.pt   **Spain:** fishersci.es  
**Sweden:** fishersci.se   **Switzerland:** fishersci.ch   **UK:** fishersci.co.uk

© 2021 Thermo Fisher Scientific Inc. All rights reserved.  
 Trademarks used are owned as indicated at fishersci.com/trademarks.