

Products for molecular biology

SUPPLYING

^{32}P , ^{33}P labeled nucleotides are supplied in aqueous solution at 400 MBq/ml (~10 mCi/ml). The new formulated **SteadyBlue™** and **SteadyClear™** nucleotides are supplied in stabilized aqueous solution and have the same radioactive concentration. The standard available quantities are 10, 20 and 40 MBq of nucleotides.

^{35}S -methionine is supplied in 50 mM TRIS-buffer, pH 7.4 (containing 10 mM 2-mercaptoethanol at 400 MBq/ml or 2000 MBq/ml (~10 or ~50 mCi/ml, respectively). The standard available quantities are 40, 80 and 2000 MBq.

Isolabel™, the ^{35}S -amino acid mix is supplied in a sterile aqueous solution containing 50 mM L-Lysine and 10 mM 2-mercaptoethanol at 400 MBq/ml (~10 mCi/ml). The standard available quantities are 40, 80 and 2000 MBq.

PACKAGING

Both the conventionally formulated and the stabilized radionucleotides and ^{35}S -amino acids are shipped refrigerated in polystyrene containers filled with dry ice. The solid carbon dioxide ensures that under normal conditions of temperature and pressure, the contents remain frozen for at least 72 hours. Stabilized products are filled into a vial equipped with **DropBlock™** insert to minimize the loss caused by the adherence of solution (typically $\geq 1 \mu\text{l}$) during handling.

IsoPack™ the new packaging system has been designed to provide optimum convenience and safety.



PRODUCTION

Labelled nucleotides are produced in a wide variety of specific activity, radiolabel and formulation to assure the achievement of appropriate sensitivity, resolution and convenience in assays.

^{32}P and ^{33}P nucleotides are produced by a novel, improved technology from carrier-free ^{32}P and ^{33}P orthophosphoric acid by a full-enzymatic method providing biologically active products with high specific activity.

^{35}S -L-methionine is produced by full-enzymatic way supplying high specific activity and biologically active form (SP isomers of nucleotides and L isomer of methionine).

Isolabel™ ^{35}S -amino acid mix is produced from a hydrolysate of E.coli grown in presence of carrier-free ^{35}S -sulphate. To ensure a high standard of radiochemical and chemical purity both nucleotides and amino acids are purified by HPLC.

QUALITY CONTROL

QC is an integral part of production. Each batch of the products is analyzed for chemical purity (HPLC, TLC, column chromatography, etc.).

AVAILABILITY

^{32}P nucleotides are available for shipment weekly from fresh lots. All ^{32}P nucleotides are reference dated for Friday of the week following the production. ^{33}P -nucleotides and ^{35}S -compounds are available biweekly (every odd week) from fresh lots. All ^{33}P nucleotides are reference-dated for Friday of the week following the shipping. All ^{35}S -compounds are reference-dated for Monday 3 weeks following the production. The products marked with * *are shipped according to mutual accommodation*.

STORAGE AND USAGE RECOMMENDATION

The whole nucleotide production range is available in three different way formulated composition: conventional (Code: FP-, KS- or FF-), as **SteadyBlue™**, ie. colored, stabilized (Code: SBP-, SBS- or SBF-) or as **SteadyClear™**, ie. colourless, stabilized (Code: SCP-, SCS- or SCF-) form.

Conventionally formulated radiophosphor nucleotides and ^{35}S -compounds should be stored at $-20 \text{ }^\circ\text{C}$ and $-80 \text{ }^\circ\text{C}$, respectively. Aliquoting of these products is recommended whenever is feasible to avoid repeated freezing and thawing. Stabilized nucleotides may be stored in liquid form at $+4 \text{ }^\circ\text{C}$ (or deep-frozen).

If the visualisation is important use the **SteadyBlue™** series or **SteadyClear™** series with **SolveBlue™** tips. The conventionally formulated or the **SteadyClear™** series is recommended if an inert dye can cause any trouble in your application.

[α -³²P] DEOXYNUCLEOTIDES

Product description	Molar activity	Code		
		Standard	SteadyBlue	SteadyClear
Deoxyadenosine 5'- -[α - ³² P] triphosphate	222 TBq/mmol (6000 Ci/mmol)	FP-303	SBP-303	SCP-303
	111 TBq/mmol (3000 Ci/mmol)	FP-203	SBP-203	SCP-203
	30 TBq/mmol (800 Ci/mmol)	FP-803	SBP-803	SCP-803
	15 TBq/mmol (400 Ci/mmol)	FP-103	SBP-103	SCP-103
Deoxycytidine 5'- -[α - ³² P] triphosphate	222 TBq/mmol (6000 Ci/mmol)	FP-305	SBP-305	SCP-305
	111 TBq/mmol (3000 Ci/mmol)	FP-205	SBP-205	SCP-205
	30 TBq/mmol (800 Ci/mmol)	FP-805	SBP-805	SCP-805
	15 TBq/mmol (400 Ci/mmol)	FP-105	SBP-105	SCP-105
Deoxyguanosine 5'- -[α - ³² P] triphosphate	111 TBq/mmol (3000 Ci/mmol)	FP-204	SBP-204	SCP-204
	30 TBq/mmol (800 Ci/mmol)	FP-804	SBP-804	SCP-804
	15 TBq/mmol (400 Ci/mmol)	FP-104	SBP-104	SCP-104

[α -³²P] RIBONUCLEOTIDES

Product description	Molar activity	Code		
		Standard	SteadyBlue	SteadyClear
Adenosine 5'- -[α - ³² P] triphosphate	111 TBq/mmol (3000 Ci/mmol)	FP-207	SBP-207	SCP-207
	30 TBq/mmol (800 Ci/mmol)	FP-807	SBP-807	SCP-807
	15 TBq/mmol (400 Ci/mmol)	FP-107	SBP-107	SCP-107
Cytidine 5'- -[α - ³² P] triphosphate	111 TBq/mmol (3000 Ci/mmol)	FP-209	SBP-209	SCP-209
	30 TBq/mmol (800 Ci/mmol)	FP-809	SBP-809	SCP-809
	15 TBq/mmol (400 Ci/mmol)	FP-109	SBP-109	SCP-109
Guanosine 5'- -[α - ³² P] triphosphate	111 TBq/mmol (3000 Ci/mmol)	FP-208	SBP-208	SCP-208
	30 TBq/mmol (800 Ci/mmol)	FP-808	SBP-808	SCP-808
	15 TBq/mmol (400 Ci/mmol)	FP-108	SBP-108	SCP-108
Uridine 5'- -[α - ³² P] triphosphate	111 TBq/mmol (3000 Ci/mmol)	FP-210	SBP-210	SCP-210
	30 TBq/mmol (800 Ci/mmol)	FP-810	SBP-810	SCP-810
	15 TBq/mmol (400 Ci/mmol)	FP-110	SBP-110	SCP-110
Thymidine 5'- -[α - ³² P] triphosphate *	111 TBq/mmol (3000 Ci/mmol)	FP-206	SBP-206	SCP-206
Cytidine 3', 5'- -[$5'$ - ³² P] biphosphate	111 TBq/mmol (3000 Ci/mmol)	FP-111	SBP-111	SCP-111

[γ -³²P] RIBONUCLEOTIDES

Product description	Molar activity	Code		
		Standard	SteadyBlue	SteadyClear
Adenosine 5'- -[γ - ³² P] triphosphate	>222 TBq/mmol (>6000 Ci/mmol)	FP-501	SBP-501	SCP-501
	185 TBq/mmol (5000 Ci/mmol)	FP-401	SBP-401	SCP-401
	111 TBq/mmol (3000 Ci/mmol)	FP-301	SBP-301	SCP-301
	30 TBq/mmol (800 Ci/mmol)	FP-801	SBP-801	SCP-801
	15 TBq/mmol (400 Ci/mmol)	FP-201	SBP-201	SCP-201
	370 GBq/mmol (10 Ci/mmol)	FP-101		
Guanosine 5'- -[γ - ³² P] triphosphate	185 TBq/mmol (5000 Ci/mmol)	FP-402	SBP-402	SCP-402
	111 TBq/mmol (3000 Ci/mmol)	FP-302	SBP-302	SCP-302
	30 TBq/mmol (800 Ci/mmol)	FP-802	SBP-802	SCP-802
	15 TBq/mmol (400 Ci/mmol)	FP-202	SBP-202	SCP-202
	370 GBq/mmol (10 Ci/mmol)	FP-102		

[³³P] NUCLEOTIDES

Product description	Molar activity	Code		
		Standard	SteadyBlue	SteadyClear
Adenosine 5'- -[γ - ³³ P] triphosphate *	>92,5 TBq/mmol (>2500 Ci/mmol)	FF-301	SBF-301	SCF-301
Deoxyadenosine 5'- -[α - ³³ P] triphosphate *	>92,5 TBq/mmol (>2500 Ci/mmol)	FF-203	SBF-203	SCF-203
Deoxycytidine 5'- -[α - ³³ P] triphosphate *	>92,5 TBq/mmol (>2500 Ci/mmol)	FF-205	SBF-205	SCF-205
Deoxyguanosine 5'- -[α - ³³ P] triphosphate *	>92,5 TBq/mmol (>2500 Ci/mmol)	FF-204	SBF-204	SCF-204
Uridine 5'- -[α - ³³ P] triphosphate *	>92,5 TBq/mmol (>2500 Ci/mmol)	FF-210	SBF-210	SCF-210
Phosphoric acid-[³³ P] *	>92,5 TBq/mmol (>2500 Ci/mmol)	FF-1		

[³⁵S] AMINO ACIDS

Product description	Rad. conc.	Molar activity	Code
L-[³⁵ S] -Methionine	400 MBq/cm ³	> 37 TBq/mmol (> 1000 Ci/mmol)	KSM-01
	2 GBq/cm ³	> 37 TBq/mmol (> 1000 Ci/mmol)	KSM-01H
Isolabel-[³⁵ S] (L-[³⁵ S]Methionine + L-[³⁵ S]Cysteine mix)	400 MBq/cm ³	> 37 TBq/mmol (> 1000 Ci/mmol)	TSM-01

OTHER [³²P] PRODUCTS

Product description	Rad. conc.	Molar activity	Code
Azidoanilido-[α - ³² P] -Guanosine triphosphate *	37 MBq/cm ³	111 TBq/mmol (3000 Ci/mmol)	AA-AGTP
Acetyl [- ³² P]-phosphate *	670 MBq/cm ³	~ 2,96 TBq/mmol ~ 80 Ci/mmol	AP-001

ACCESSORIES

Product description	Code
SolvBlue Tip (containing ~ 10 µg Patent Blue)	BT-1

** Shipping schedule to be negotiated*