

Technical Information about Biolog's *Ko-Libri* Library of Nucleosides and Nucleobases



BIOLOG Cat. No.: K 001

Compounds: To date Biolog's *Ko-Libri* library of nucleosides and nucleobases contains 44 nucleoside analogues and 4 nucleobases. A complete list of all products included can be found overleaf. Normally all compounds can be provided in larger quantities and immediate re-supply is available.

All compounds are supplied as DMSO stock solutions (typically 10 mM) at 250 μ L per vial. As compound solubility in DMSO sometimes is not uniform, please make sure to re-suspend compounds that may settle prior to transfer.

Purity: Typical purity of each compound is > 95% (HPLC / UV / λ_{max}). Each compound has an individual batch/lot number and specific purity data generated during HPLC controls is available on request. The products are not sterile and have not been tested for endotoxins.

Packing Material: Compounds are filled into round bottom polypropylene storage tubes (temperature range of - 80°C to + 120°C) in 1.4 mL size with alphanumeric marking. The tubes are packaged in 96 (8 x 12) well polypropylene racks and sealed with vial caps that can be pierced a single time. Caps will maintain a strong seal at temperatures down to - 80°C, and provide an excellent vapour barrier for both water and DMSO.

Polypropylene racks have standard microplate footprint that fits ANSI-SBS standards (outside dimension of the base footprint: length 127.76 mm +/- 0.5 mm; width 85.48 mm +/- 0.5 mm), enabling them to be utilized in robotic systems. Furthermore, the racks have lids that lock down securely for storage or shipping and that can be opened on hinges or lifted off manually or by robotics (*all packing material is supplied by Matrix Technologies Corporation: Screen Mates™ 1.4 mL tubes in latch rack - item no. 4251; SepraSeal™ Solid Caps - item no. 4463*).

Plate Layout: The first and the last row of each rack have been filled with blank vials for use as controls resulting in a maximum number of 80 compounds per rack. Please refer to the supporting material provided with the library for rack position of each compound.

Supporting Material: Biolog's *Ko-Libri* library of nucleosides and nucleobases is accompanied by a technical datasheet as well as a CD-ROM containing electronic data files (ISIS™/BASE and MSExcel). These files include chemical structure, name, catalogue number, CAS number, and rack position of each compound.

Storage and Stability: The *Ko-Libri* library of nucleosides and nucleobases will be shipped on dry ice to maintain the original high purity of all compounds included and should be stored frozen upon receipt (- 20°C necessary, - 80°C recommended). Prior to opening a frozen vial, it is recommended to allow for equilibration to room temperature for at least 60 minutes. Please allow thawing only before using the product and avoid repeated freeze/thaw cycles.

Toxicity and Safety: Since both nucleosides and nucleobases have multiple tasks in every organism, it is likely that their analogues will interfere with many cell regulation processes *in vivo*. However, due to the rather small quantities to work with, no health hazards have been reported. Nevertheless please keep in mind, that the *in vivo* properties of these compounds are not sufficiently characterized up to now. Avoid skin contact or ingestion and allow only trained personnel to handle the product.

Our products are designed, developed and sold for research purposes only! They are intended for *in vitro* and nonhuman *in vivo* laboratory applications. Any other use requires approval of health authorities.

Customised Service: Biolog also offers a flexible service which allows the customer to choose the number of compounds included in a customised library, the compound layout as well as the plate type. Alternatively, plates or vials supplied by the customer could be used as well.

All customer requirements as well as desired plate types are subject to approval by Biolog. For further information or to request a corresponding quotation, please feel free to contact us.

P.t.o.

Nucleosides included in the *Ko-Libri* library of nucleosides and nucleobases:

Pos.	Cat.#	Compound Name	CAS No.	Solvent	Conc. [mM]
1-A2	A 045	8-Azidoadenosine (8-N ₃ -Ado)	[4372-67-2]	DMSO	10
1-B2	A 078	5'-Amino-5'-deoxyguanosine (5'-NH ₂ -Guo)	[4099-84-7]	DMSO	10
1-C2	A 079	5'-Azido-5'-deoxyguanosine (5'-N ₃ -Guo)	[42204-44-4]	DMSO	10
1-D2	A 080	2-Amino-6-chloropurine riboside (2-NH ₂ -6-Cl-PuR)	[2004-07-1]	DMSO	10
1-E2	A 081	2',3'-O-para-Anisylideneguanosine (2',3'-O-pAnisyl-Guo)	[98346-15-7]	DMSO	10
1-F2	B 021	8-Bromo-2'-deoxyguanosine (8-Br-dGuo)	[13389-03-2]	DMSO	10
1-G2	B 027	8-Bromo-2'-deoxyadenosine (8-Br-dAdo)	[14985-44-5]	DMSO	10
1-H2	B 033	8-Bromoadenosine (8-Br-Ado)	[2946-39-6]	DMSO	10
1-A3	B 034	8-Bromo-2'-O-methylguanosine (8-Br-2'-O-Me-Guo)	[847649-49-4]	DMSO	10
1-B3	B 036	8-Bromoguanosine (8-Br-Guo)	[4016-63-1]	DMSO	10
1-C3	B 038	8-Bromo-2',3',5'-tri-O-acetylguanosine (8-Br-2',3',5'-TAc-Guo)	[15717-45-0]	DMSO	10
1-D3	B 039	8-Bromoxanthosine (8-Br-Xao)	[3001-46-5]	DMSO	10
1-E3	C 006	8-Chloroadenosine (8-Cl-Ado)	[34408-14-5]	DMSO	10
1-F3	C 017	2-Chloroadenosine (2-Cl-Ado)	[146-77-0]	DMSO	10
1-G3	C 019	8-Chloroinosine (8-Cl-Ino)	[116285-77-9]	DMSO	10
1-H3	C 021	2-Chloroinosine (2-Cl-Ino)	[13276-43-2]	DMSO	10
1-B4	C 026	8-Chloroguanosine (8-Cl-Guo)	[2104-68-9]	DMSO	10
1-D4	C 028	2-Chloro-2'-deoxyadenosine (2-Cl-dAdo, Cladribine)	[4291-63-8]	DMSO	10
1-E4	C 034	5-Chlorocytidine	[25130-29-4]	DMSO	10
1-F4	C 058	6-Chloropurine riboside (6-Cl-PuR)	[2004-06-0]	DMSO	10
1-G4	C 060	8-(4-Chlorophenylthio)guanosine (8-pCPT-Guo)	[?]	DMSO	10
1-H4	D 002	2',3'-Dideoxyadenosine (ddA)	[4097-22-7]	DMSO	10
1-A5	D 012	5,6-Dichlorobenzimidazole riboside (DRB)	[53-85-0]	DMSO	10
1-B5	D 039	2',3'-Dideoxyguanosine (ddG)	[085326-06-3]	DMSO	10
1-C5	D 040	2',3'-Dideoxythymidine / 3'-deoxythymidine (ddT)	[3416-05-5]	DMSO	10
1-D5	D 041	3'-Deoxyguanosine (3'-dG)	[3608-58-0]	DMSO	10
1-E5	D 050	2'-Deoxy-8-hydroxyadenosine (8-OH-dAdo)	[?]	DMSO	10
1-F5	D 062	2'-Deoxyinosine (2'-dIno)	[890-38-0]	DMSO	10
1-G5	D 063	2,6-Dichloro-2',3',5'-triacetyluracil riboside (2,6-DCI-2',3',5'-TAc-PuR)	[3056-18-6]	DMSO	10
1-H5	D 064	2,6-Dichloropurine riboside (2,6-DCI-PuR)	[13276-52-3]	DMSO	10
1-A6	D 065	2'-Deoxyguanosine (2'-dG)	[961-07-9]	DMSO	10
1-B6	H 001	8-Hydroxyguanosine (8-OH-Guo)	[3868-31-3]	DMSO	10
1-E6	H 011	8-Hydroxyadenosine (8-OH-Ado)	[29851-57-8]	DMSO	10
1-F6	I 004	5-Iodotubercidin (7-Deaza-7-iodoadenosine)	24386-93-4	DMSO	10
1-G6	I 005	2',3'-Isopropylideneinosine (2',3'-Ipr-Ino)	[2140-11-6]	DMSO	10
1-H6	I 006	Inosine (Ino)	[58-63-9]	DMSO	10
1-A7	I 007	2',3'-Isopropylidene-guanosine (2',3'-Ipr-Guo)	[362-76-5]	DMSO	10
1-B7	M 043	6-Methylmercaptapurine riboside (6-SMe-PuR)	[342-69-8]	DMSO	10
1-C7	M 044	6-Mercaptopurine riboside (6-SH-PuR)	[574-25-4]	DMSO	10
1-D7	M 045	2'-O-Methylguanosine (2'-O-Me-Guo)	[2140-71-8]	DMSO	10
1-E7	M 046	8-Mercaptoguanosine (8-SH-Guo)	[26001-38-7]	DMSO	10
1-F7	P 016	Purine riboside (PuR)	[550-33-4]	DMSO	10
1-G7	T 006	2',3',5'-Triacetylinosine (2',3',5'-TAc-Ino)	[3181-38-2]	DMSO	10
1-H7	T 007	2',3',5'-Tri-O-benzoylguanosine (2',3',5'-TBrz-Guo)	[66048-53-1]	DMSO	10

Nucleobases included in the *Ko-Libri* library of nucleosides and nucleobases:

Pos.	Cat.#	Compound Name	CAS No.	Solvent	Conc. [mM]
1-A4	C 023	8-Chloroadenine (8-Cl-Ade)	[28128-28-1]	DMSO	10
1-C4	C 027	8-Chloroguanine (8-Cl-Gua)	[22052-03-5]	DMSO	10
1-C6	H 002	8-Hydroxyguanine (8-OH-Gua)	[5614-64-2]	DMSO	1
1-D6	H 007	8-Hydroxyadenine (8-OH-Ade)	[21149-26-8]	DMSO	10