

### mRNA modified nucleotides

CAS No.	NAME	MF	MW
3063-71-6	ATP sodium solution	C <sub>10</sub> H <sub>13</sub> N <sub>5</sub> Na <sub>3</sub> O <sub>13</sub> P <sub>3</sub>	573.13
36051-31-7	GTP sodium solution	C <sub>10</sub> H <sub>13</sub> N <sub>5</sub> Na <sub>3</sub> O <sub>14</sub> P <sub>3</sub>	589.13
81012-87-5	CTP sodium solution	C <sub>9</sub> H <sub>13</sub> N <sub>3</sub> Na <sub>3</sub> O <sub>14</sub> P <sub>3</sub>	549.1
19817-92-6	UTP sodium solution	C <sub>9</sub> H <sub>12</sub> N <sub>2</sub> Na <sub>3</sub> O <sub>15</sub> P <sub>3</sub>	550.09
N/A	ATP Tris solution	C <sub>10</sub> H <sub>16</sub> N <sub>5</sub> O <sub>13</sub> P <sub>3</sub> (free acid)	507.18 (free acid)
N/A	GTP Tris solution	C <sub>10</sub> H <sub>16</sub> N <sub>5</sub> O <sub>14</sub> P <sub>3</sub> (free acid)	523.18 (free acid)
N/A	CTP Tris solution	C <sub>9</sub> H <sub>16</sub> N <sub>3</sub> O <sub>14</sub> P <sub>3</sub> (free acid)	483.16 (free acid)
N/A	UTP Tris solution	C <sub>9</sub> H <sub>15</sub> N <sub>2</sub> O <sub>15</sub> P <sub>3</sub> (free acid)	484.14 (free acid)
327174-86-7 (free acid)	5-Me-CTP	C <sub>10</sub> H <sub>15</sub> N <sub>3</sub> Na <sub>3</sub> O <sub>14</sub> P <sub>3</sub>	563.1
N/A	5-OMe-UTP	C <sub>10</sub> H <sub>14</sub> N <sub>2</sub> Na <sub>3</sub> O <sub>16</sub> P <sub>3</sub>	579.98
N/A	N7-Me-GTP	C <sub>11</sub> H <sub>18</sub> N <sub>5</sub> O <sub>14</sub> P <sub>3</sub> (free acid)	537.22 (free acid)
1175-34-4 (free acid)	Pseudo UTP sodium solution	C <sub>9</sub> H <sub>12</sub> N <sub>2</sub> Na <sub>3</sub> O <sub>15</sub> P <sub>3</sub>	550.1
1428903-59-6	N1-Me-Pseudo UTP sodium solution	C <sub>10</sub> H <sub>14</sub> N <sub>2</sub> Na <sub>3</sub> O <sub>15</sub> P <sub>3</sub>	564.13
1445-07-4	Pseudouridine	C <sub>9</sub> H <sub>12</sub> N <sub>2</sub> O <sub>6</sub>	244.2
13860-38-3	N1-Me-Pseudouridine	C <sub>10</sub> H <sub>14</sub> N <sub>2</sub> O <sub>6</sub>	258.23

### "Cap" structures and the analogues

CAS No.	NAME	MF	MW
N/A	GpppG	N/A	N/A
N/A	M7-GpppG	N/A	N/A
N/A	ARCA	N/A	N/A
N/A	Cap 0	N/A	N/A
N/A	Cap 1	N/A	N/A
N/A	S-Adenosyl methionine, SAM	N/A	N/A

### dNTP

CAS No.	NAME	MF	MW
N/A	dNTP mix(A,C,T,G) 25 mM each	N/A	N/A
N/A	dNTP mix(A,C,T,G) 10 mM each	N/A	N/A
102814-08-4	dUTP.3Na	C <sub>9</sub> H <sub>12</sub> N <sub>2</sub> Na <sub>3</sub> O <sub>14</sub> P <sub>3</sub>	534.1
1927-31-7	dATP.3Na	C <sub>10</sub> H <sub>13</sub> N <sub>5</sub> Na <sub>3</sub> O <sub>12</sub> P <sub>3</sub>	N/A
93919-41-6	dGTP.3Na	C <sub>10</sub> H <sub>13</sub> N <sub>5</sub> Na <sub>3</sub> O <sub>13</sub> P <sub>3</sub>	573.1
102783-51-7	dCTP.3Na	C <sub>9</sub> H <sub>13</sub> N <sub>3</sub> Na <sub>3</sub> O <sub>13</sub> P <sub>3</sub>	533.1
27821-54-1	dTTP.3Na	C <sub>10</sub> H <sub>14</sub> N <sub>2</sub> Na <sub>3</sub> O <sub>14</sub> P <sub>3</sub>	548.1

### Sugar nucleotide

CAS No.	NAME	MF	MW
3063-71-6; 15839-70-0	CMP-Neu5Ac.2Na	C <sub>20</sub> H <sub>29</sub> N <sub>4</sub> O <sub>16</sub> PNa <sub>2</sub>	658.41
148296-47-3	GDP-L-Fuc.2Na	C <sub>16</sub> H <sub>23</sub> N <sub>5</sub> O <sub>15</sub> P <sub>2</sub> Na <sub>2</sub>	633.31
103301-73-1; 48296-46-2	GDP-D-Man.2Na	C <sub>16</sub> H <sub>23</sub> N <sub>5</sub> O <sub>16</sub> P <sub>2</sub> Na <sub>2</sub>	649.3
137868-52-1; 2956-16-3	UDP-Gal.2Na	C <sub>15</sub> H <sub>22</sub> N <sub>2</sub> O <sub>17</sub> P <sub>2</sub> Na <sub>2</sub>	610.27
63700-19-6	UDP-GlcA.3Na	C <sub>15</sub> H <sub>19</sub> N <sub>2</sub> O <sub>18</sub> P <sub>2</sub> Na <sub>3</sub>	646.23
91183-98-1	UDP-GlcNAc.2Na	C <sub>17</sub> H <sub>25</sub> N <sub>3</sub> O <sub>17</sub> P <sub>2</sub> Na <sub>2</sub>	651.32
108320-87-2; 7277-98-7	UDP-GalNAc.2Na	C <sub>17</sub> H <sub>25</sub> N <sub>3</sub> O <sub>17</sub> P <sub>2</sub> Na <sub>2</sub>	651.32
1611490-64-2	UDP-GlcNAz.2Na	C <sub>17</sub> H <sub>24</sub> N <sub>6</sub> O <sub>17</sub> P <sub>2</sub> Na <sub>2</sub>	692.05
653600-61-4	UDP-GalNAz.2Na	C <sub>17</sub> H <sub>24</sub> N <sub>6</sub> O <sub>17</sub> P <sub>2</sub> Na <sub>2</sub>	692.05
7333-33-7; 133-89-1	UDP-Glc	C <sub>15</sub> H <sub>22</sub> N <sub>2</sub> O <sub>17</sub> P <sub>2</sub> Na <sub>2</sub>	610.27
108320-89-4	UDP-Xyl.2Na	C <sub>14</sub> H <sub>19</sub> N <sub>2</sub> O <sub>16</sub> P <sub>2</sub> Na <sub>2</sub>	536.27
148407-07-2	UDP-GalA.3Na	C <sub>15</sub> H <sub>19</sub> N <sub>2</sub> O <sub>18</sub> P <sub>2</sub> Na <sub>3</sub>	646.23

34620-77-4	Maltohexaose	C <sub>36</sub> H <sub>62</sub> O <sub>31</sub>	990.86
34620-78-5; 207511-07-7	Maltoheptaose	C <sub>42</sub> H <sub>72</sub> O <sub>36</sub>	1153.02
66567-45-1; 6156-84-9	Maltooctaose	C <sub>48</sub> H <sub>82</sub> O <sub>41</sub>	1315.16
157381-11-8	Gal-G2-CNP	C <sub>24</sub> H <sub>34</sub> CINO <sub>18</sub>	659.97
118291-90-0	G3-CNP	C <sub>24</sub> H <sub>34</sub> CINO <sub>18</sub>	659.97

## Recombinant Proteases

### Industrial protease

NAME	RESTRICTION SITES	ACTIVITY	PACKAGE
Recombinant Lys C	Carboxyl-terminal peptide bond of Lys residue	≥3AU/mg	10mg/vial; 0.5g/bottle
Recombinant Trypsin	Arg and Lys residues C-terminal peptide bonds	≥3800USP/mg	10mg/vial; 1g/bottle
Recombinant Kex2	Arg-Arg, Lys-Arg dibasic amino acid carboxyl terminal peptide bond	≥10U/mg	10mg/vial; 1g/bottle
Recombinant carboxypeptidase B	C-terminal basic amino acid Lys, Arg or His	≥150U/mg	10mg/vial; 1g/bottle
Recombinant enterokinase	Asp-Asp-Asp-Asp-Lys sequence Lys C-terminal peptide bond	≥10U/mg	10mg/vial; 1g/bottle
Recombinant Nuclease	Capable of degrading all forms of DNA and RNA and fully digesting nucleic acids into 5'-monophosphate oligonucleotides approximately 3-5 bases in length under a very broad range of conditions	≥1.5*10 <sup>6</sup> U/mg	1mg/vial
Recombinant methionine adenosyltransferase	S-adenosylmethionine that catalyzes the formation of methionine and ATP	≥0.6U/mg	1mg/vial; 10mg/vial
Recombinant Arginase	Catalytic hydrolysis of L-arginine to produce ornithine	≥20U/mg	1mg/vial; 10mg/vial
Recombinant Arginine Deiminase	Catalytic hydrolysis of L-arginine to produce citrulline	≥30U/mg	1mg/vial; 10mg/vial
Recombinant Proline Hydroxylase	Catalyze L-proline to L-hydroxyproline	≥1.0U/mg	1mg/vial; 10mg/vial
<b>Industrial conventional packaging specifications are 1g/bottle, 10g/bottle and 50g/bottle</b>			

### Protease for scientific research

NAME	MAIN RESEARCH PURCHASE	PACKAGE
Recombinant Lys-C	Protein, peptide and antibody recombinant drug mass peptide map; Proteomic peptide mapping research; Peptide N-terminal sequencing; Identification of phosphorylated peptides; Disulfide bond analysis; N-glycan analysis	20μg/vial; 1mg/vial
Recombinant Trypsin (Sequencing)	Mass peptide map of protein peptides and antibody biopharmaceuticals; Proteomic peptide mapping analysis; Protein specific degradation and protein sequencing	20μg/vial; 1mg/vial
Recombinant Trypsin/Lys C Mix (Sequencing)	Proteomics Peptide Mapping Analysis Suitable for mass spectrometry analysis of larger molecular weight or more hydrophobic and insoluble proteins; Quality research such as monoclonal antibody drug mass peptide map and sequence analysis	20μg/vial; 1mg/vial
Recombinant Glutamyl Endopeptidase	Mass peptide map of protein peptides and antibody biopharmaceuticals; Peptide map analysis of insulin drugs; Proteomic Peptide Mapping Research	50μg/vial; 1mg/vial



Recombinant Tobacco Etch Virus Protease	Fusion tag removal of recombinantly expressed proteins	50µg/vial; 1mg/vial
Recombinant Human Hyaluronidase (PH20)	Has hydrolytic and transglycosidase activity, capable of degrading hyaluronic acid and chondroitin sulfate	50µg/vial; 1mg/vial
Penicillinase	remove antibiotic residues; Sterility testing of beta-lactam antibiotics, etc.	per request
RecomB75:E82binant Collagenase I	Specifically hydrolyzes the three-dimensional helical structure of native collagen	50µg/vial; 1mg/vial

### Biopharmaceutical raw materials

CAS No.	NAME	PACKAGE	APPLICATION
844439-96-9	Insulin degludec	10g/bottle; 100g/bottle; 500g/bottle	For the treatment of type 2 diabetes
116094-23-6	Insulin aspart	10g/bottle; 100g/bottle; 500g/bottle	For the treatment of type 1 and type 2 diabetes
204656-20-2	Liraglutide	10g/bottle; 100g/bottle; 500g/bottle	Treatment of type 2 diabetes; lose weight
910463-68-2	Semaglutide	10g/bottle; 100g/bottle; 500g/bottle	Treatment of type 2 diabetes; lose weight

### Therapeutic Enzymes for Research

NAME	ORIGINAL RESEARCH	INDICATIONS
RecombinantU ricase	Horizon Pegloticase	For adults with gout who are refractory to treatment or who cannot tolerate conventional therapy; hyperuricemia
Recombinant ArginineDeiminase	Polaris ADI-PEG-20K	Solid tumors; liver cancer and mesothelioma, etc.
RecombinantPhenylalanine AmmoniaLyase	Biomarin Palynziq	Phenylketonuria, hyperphenylalaninemia
Recombinant Asparaginase	Servier Calaspargase pegol	acute lymphoblastic leukemia or pancreatic cancer
Recombinant Human Hyaluronidase (PH20)	Halozyme Therapeutics HyleneX	Subcutaneous administration as a fast-absorbing agent for small-molecule drugs Penetration enhancers for subcutaneous administration of macromolecular drugs Such as antibodies, immunosuppressants, insulin, etc. PEGylation for Adjuvant Therapeutics in Solid Tumors
Recombinant Collagenase	Auxilium Xiaflex	Fibrocavernositis of the penis - Peyronie's disease, Dupuytren's contracture - progressive hand disorder

### Protease Residue Detection Kit

Recombinant LysC Residue Detection Elisa Kit

Recombinant Trypsin Residue Detection Elisa Kit

Recombinant Kex2 Residue Detection Elisa Kit

Recombinant CPB Residue Detection Elisa Kit

### Recombinant cytokines for scientific research

NAME	APPLICATION
Recombinant Human Parathyroid Hormone (1-34)	Treatment of osteoporosis in postmenopausal women; Primary or hypogonadal osteoporosis
Truncated recombinant human keratinocyte growth factor-1	Treatment of severe oral mucositis in patients with hematological malignancies
recombinant human epidermal growth factor(rh EGF)	It is suitable for the treatment of skin burns and scald wounds from superficial to deep burns and scald wounds, residual wounds, donor site wounds and chronic ulcer wounds; It is suitable for corneal displacement, after pannus surgery, etc.
Biosynthetic Glucagon	Treatment of severe hypoglycemia in diabetic patients receiving insulin;Used to inhibit gastrointestinal motility during gastrointestinal examination; Assess maximal secretion of insulin beta cells in diabetic patients
Recombinant human glucagon-like peptide-2 analogue	Treatment of adult and pediatric patients 1 year and older with short bowel syndrome (SBS) who are dependent on parenteral support
Recombinant human glucagon-like peptide-1 analogue	Glycemic control in adults with type 2 diabetes;Reduce the risk of major adverse cardiovascular events, cardiovascular death, nonfatal myocardial infarction, or nonfatal stroke in adults with type 2 diabetes and cardiovascular disease
Recombinant Human Insulin & Insulin Analogue	Used as growth factor in serum-free medium; For patients with diabetes who require insulin therapy
Recombinant Human Thymosin $\beta$ 4	Dry eye, neurokeratitis, repair tissue damage
Recombinant Human Basic Fibroblast Growth Factor-18	For osteoarthritis, knee and knee cartilage damage
Recombinant Human Basic Fibroblast Growth Factor	Promote wound healing Can be used for burn wounds including superficial, deep, granulation wounds, chronic wounds including chronic granulation wounds, ulcers and bedsores, etc. and fresh wounds including trauma, surgical wounds, etc.
Recombinant Human like Collagen	Repair Damage Antioxidant Anti-wrinkle;Medical Beauty Beauty Filler
Recombinant Hirudin	For the prevention of deep vein thrombosis after hip replacement surgery